

THE ARCHITECT & BUILDING NEWS

16 JUNE 1955

VOL. 207

NO. 24

ONE SHILLING WEEKLY

- EALING TECHNICAL COLLEGE EXTENSION
- HOUSE AT BLACKHEATH

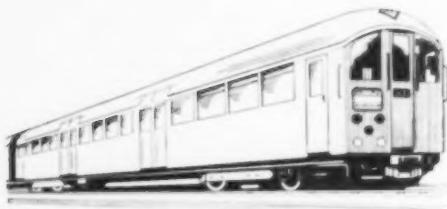
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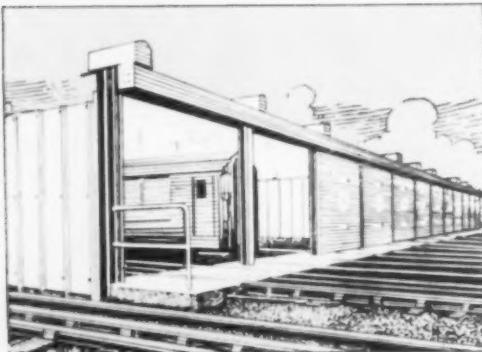
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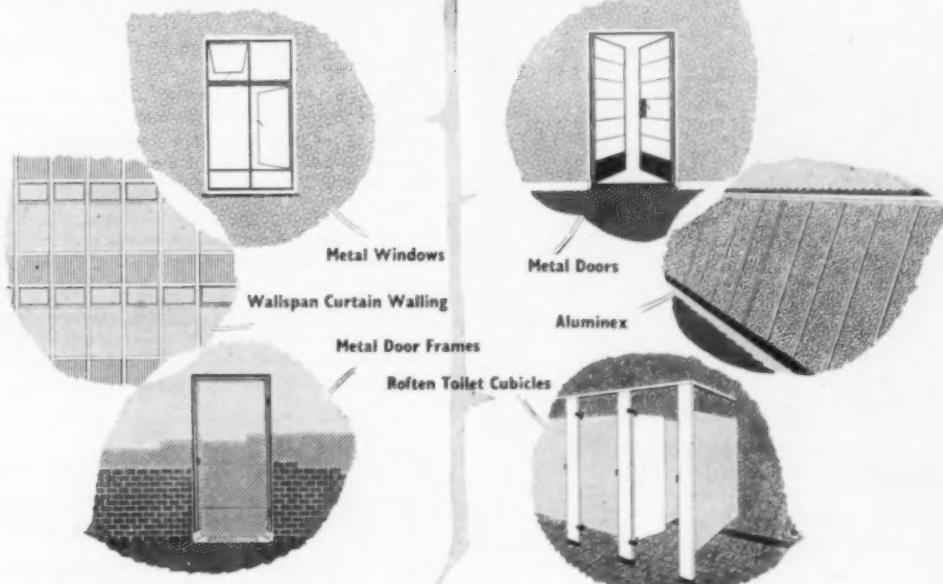
Arthur Brooks has green fingers Time was when Mr. Brooks*—a structural engineer—won first prize for roses at a Surrey Horticultural Show. And when all six foot two inches of Mr. Brooks won a table tennis championship for the Divisional Police. And when he became a golfer with a handicap of 8. Time was, in short, when Mr. Brooks had time! But as Williams & Williams Divisional Manager with an overriding responsibility for Greater London, the West of England and South Wales, and as a Director of Williams & Williams (South Western) Ltd., he has time only for the odd job in the garden now. You'll find him digging into metal window problems, nipping trouble in the bud, cutting corners and smoothing paths of architects. He does it all so pleasantly too!

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* MR. A. S. BROOKS supervises offices in London (Sloane 0323), Bromley (Ravensbourne 6274), Bristol (38907), Cardiff (27092).

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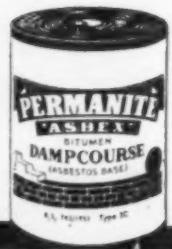
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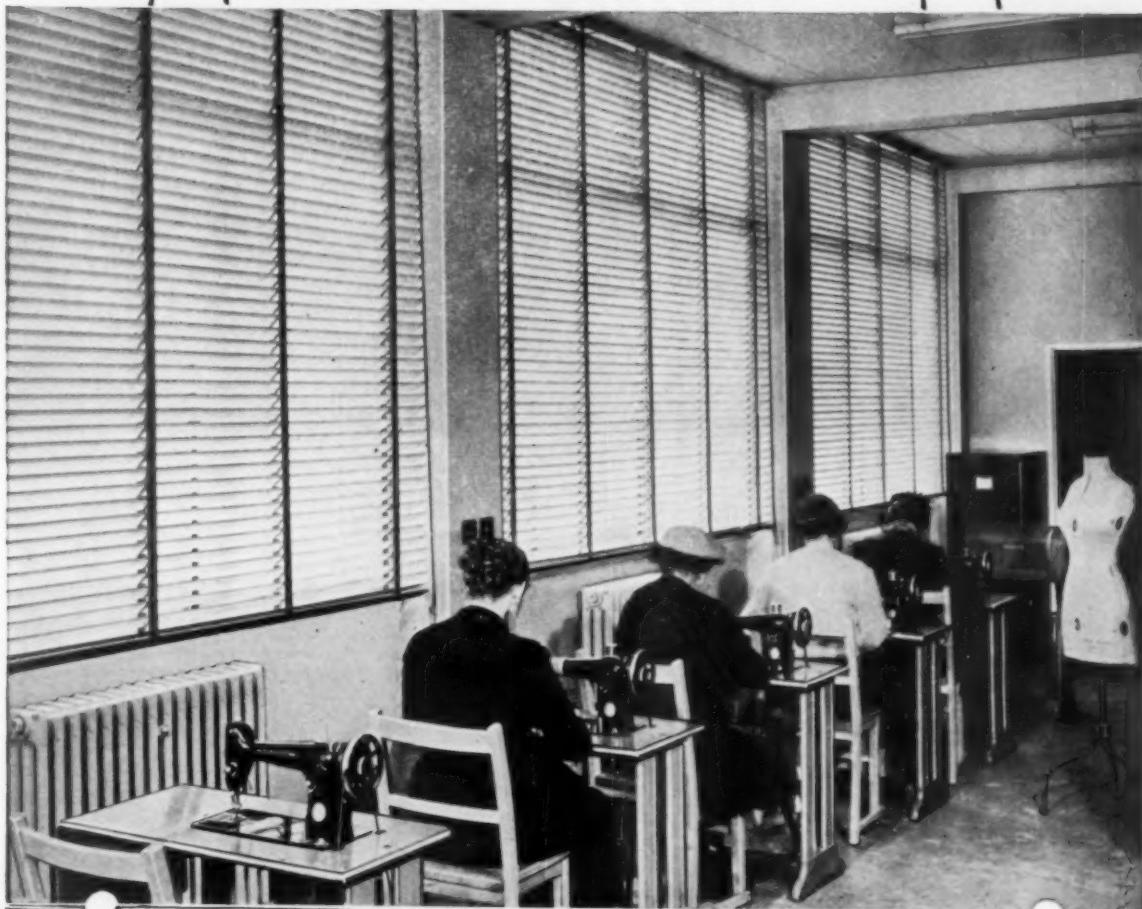
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Architects: Willink and Dods, Chartered Architects.*

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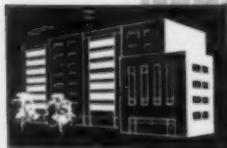
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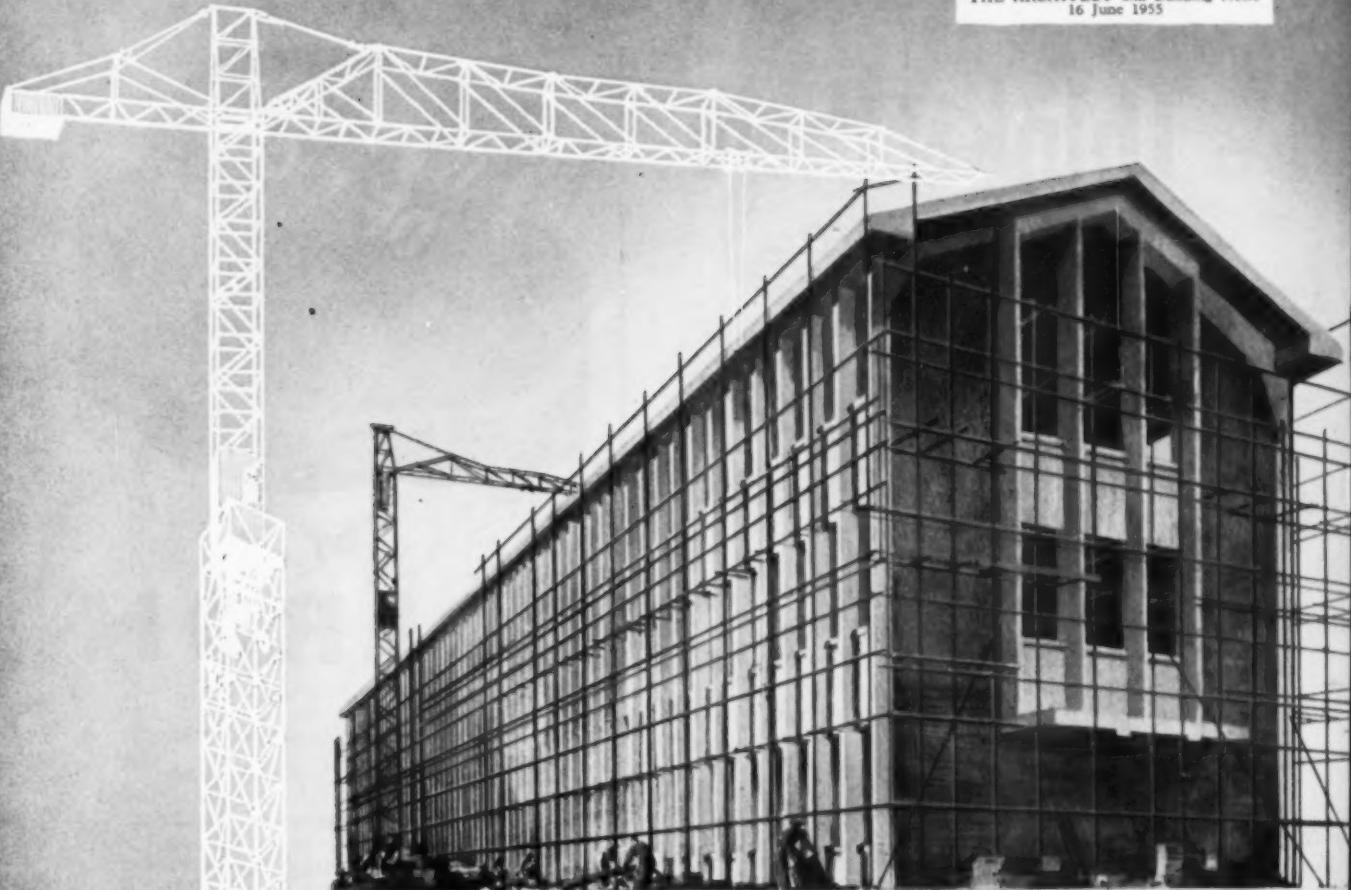
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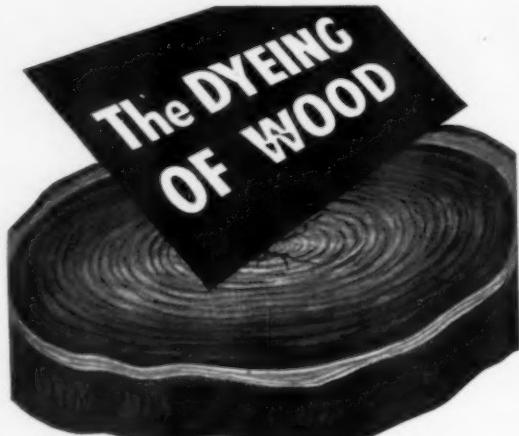
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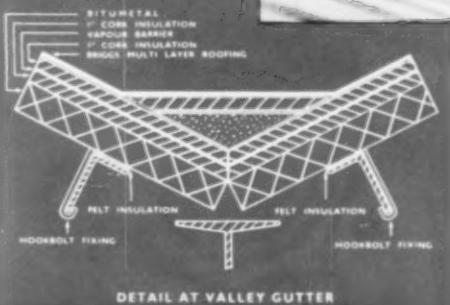
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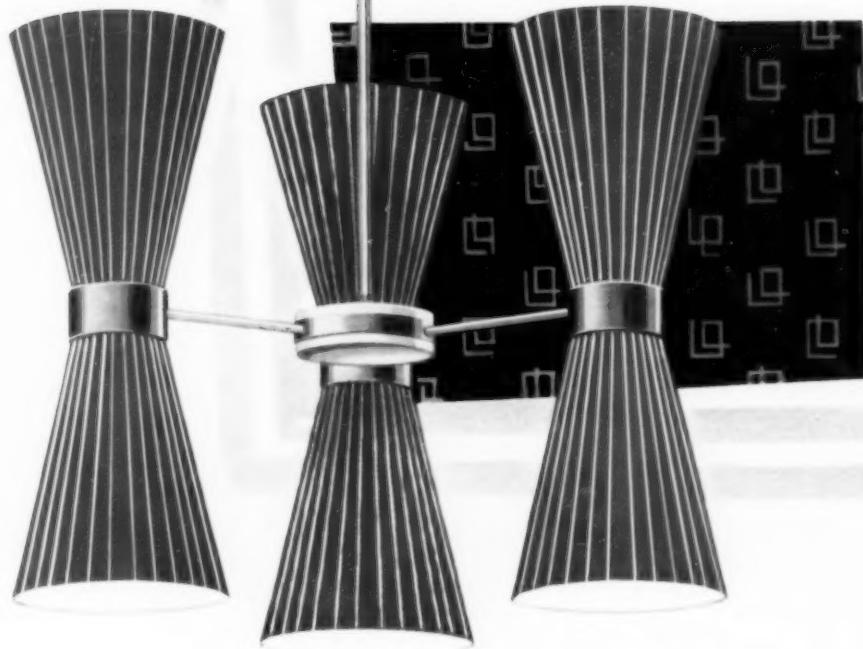
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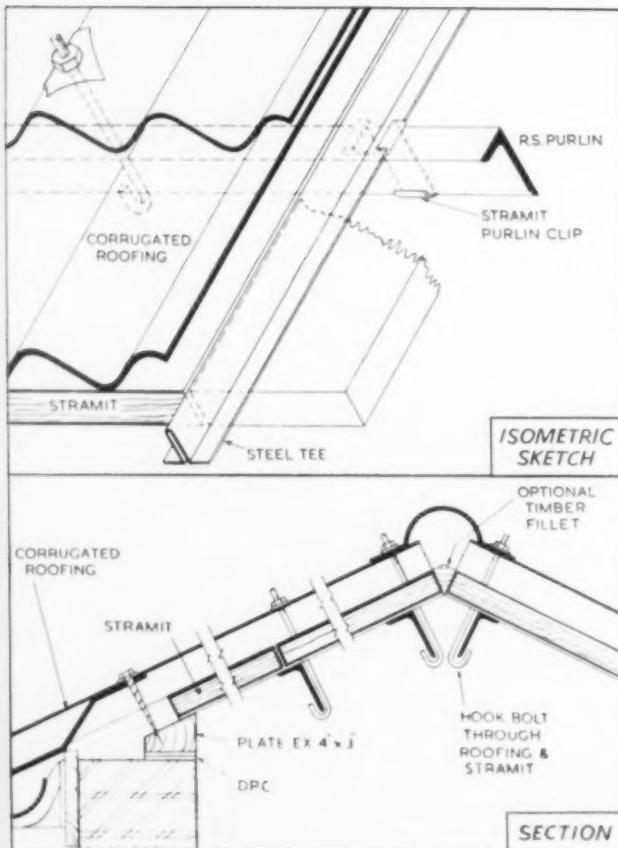
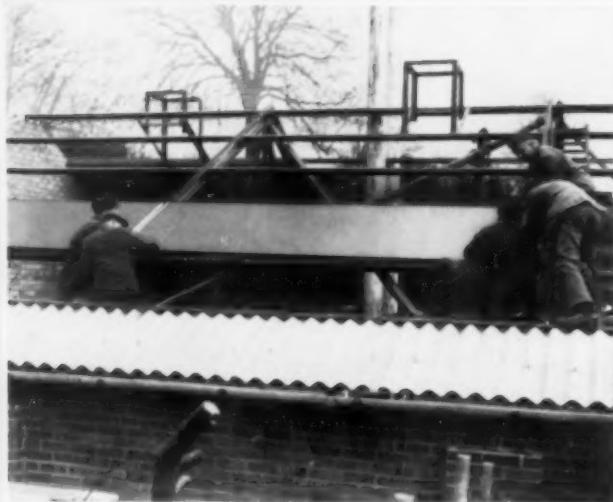
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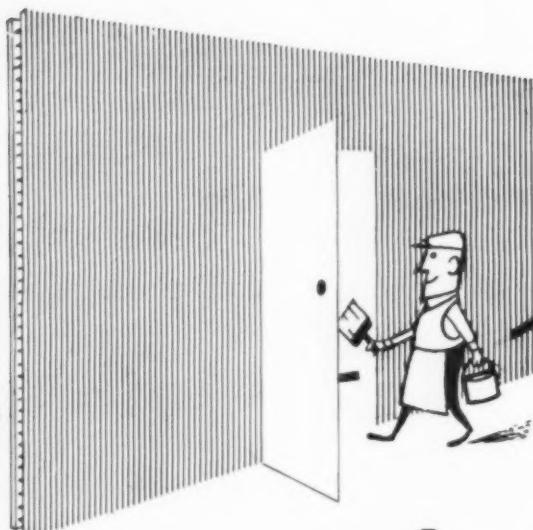
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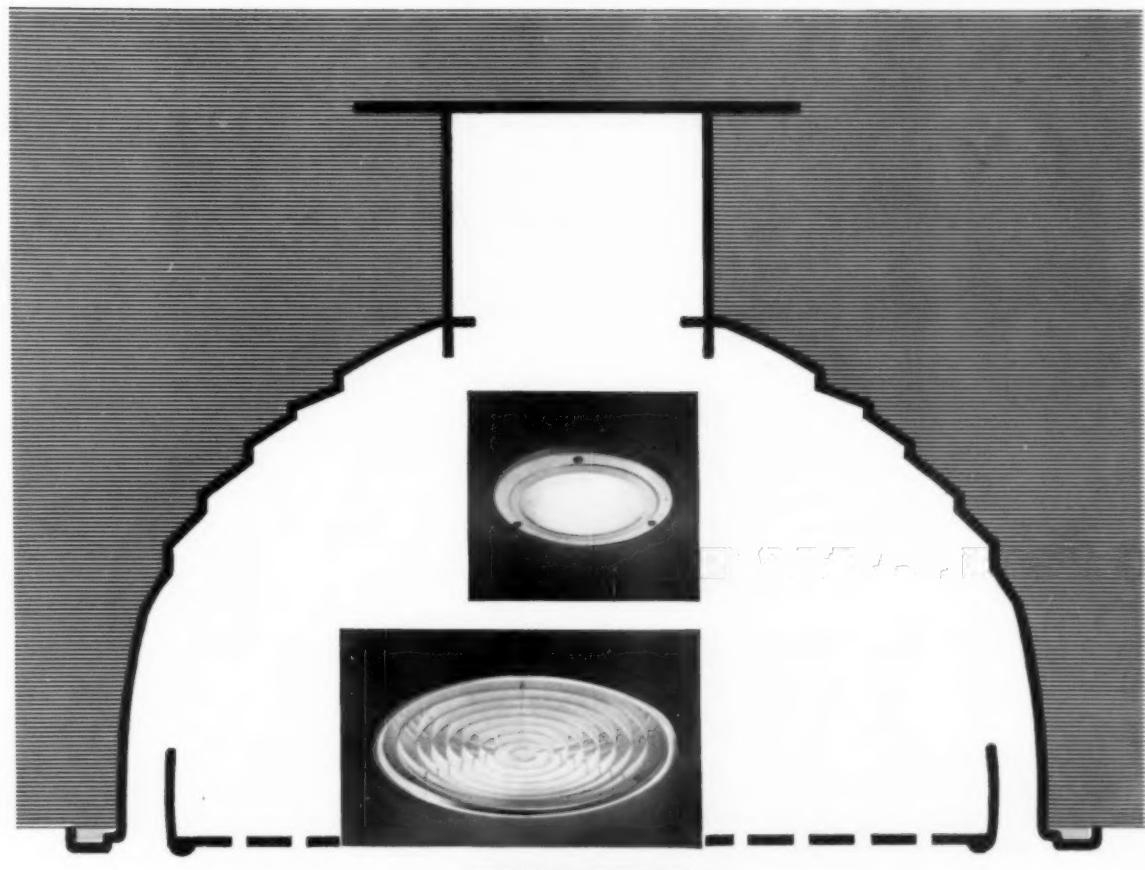
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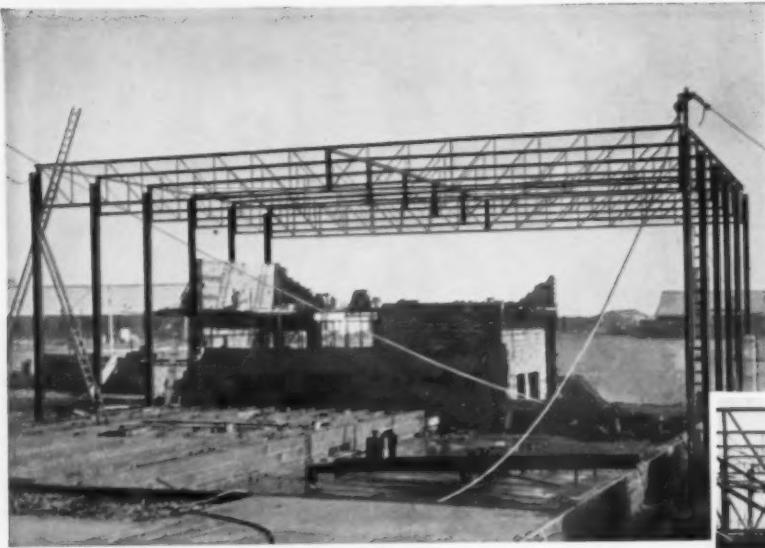


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THE
ARCHITECT
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16 June 1955

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COST CONSCIOUSNESS

AT Harrogate the emphasis of the Conference papers was on the business aspect of architecture and building. As Sir Thomas Bennett said, "In all periods of building, the control of costs has been difficult, but in a period where money is rapidly diminishing in value and building takes place in widely different parts of the country, both estimating and control have become increasingly difficult."

Everyone is looking to the architect to sharpen his wits about money, while striving to keep his design up to scratch.

We will write more on this when the report of the Conference Discussion has been digested.

The Royal Incorporation at their annual dinner in Aberdeen, were told by the Minister of State for Scotland, Lord Strathclyde, that although he had no doubt that a good architect, properly employed, will always save money, it was his view that architects could develop a still greater cost consciousness. "We need cost-conscious architects and design-conscious administrators," he said. "We want administrators who have enough good sense to let the architects go ahead with their own job. We need architects who know enough about costs to ensure that the administrators' trust is not misplaced."

It would take the thing further if an analysis could be made of what proportion of the cost of building was outside the control of the designer, i.e., the cost of raw materials, equipment, wages, land, legal charges, fixed price items and so on.

If all these continue on a rising curve it will be impossible to compensate for ever in terms of what is left outside this area of cost. Each branch of the industry thinks it is the others who should economize.

In the four-point plan outlined by the President of the N.F.B.T.E., the builders, too, say that they are left with a very narrow field in which they can directly influence the general level of building costs.

Mr. Richard Costain, in describing his firm's office building, wrote in this journal that where "building owners, designers and contractors formed a selected

team at the very birth of the project and not a bunch of strangers strung together by a succession of extraneous conditions" there was a saving of approximately 10 per cent.

This is certainly a point to be studied by the Joint Consultative Committee of Architects, Quantity Surveyors and Builders if they have not already done so. At the best it can only apply to few buildings.

A productivity team from John Laing & Son, Ltd., has gone off to America to study the building and civil engineering methods over there. Perhaps on their return we shall have more facts and figures about pre-planning.

We look, then, to "Better Organization," "Prefabrication" and "Mechanization" to offset the bugbears of strikes, tea-breaks, clients' vagaries, officialdom, bad weather, late deliveries, shortages and lack of information. But in the meantime would it not be a good idea to single out specific points of attack to reduce costs, taking them in order of solubility.

The question of whether price-fixing is in the interest of the consumer should be settled for one thing. The price of materials such as steel and cement may be right, taking into consideration the cost of marketing, research and investment in new plant, etc. But the public knows that the Anti-Trust laws in America are in existence to give point to the saying *Quis custodiet ipsos custodes?*

There remains the fact that buildings outlast the conditions obtaining when they were designed and erected. (It is lucky for us that most of the temporary houses still have some life left in them.)

It is still necessary that buildings should look well. The example of some of the very business-like architects has not been encouraging and the cost in delay due to poor design having to be revised or modified is often considerable. It would appear that a good designer and good business head in partnership is a *sine qua non* for good practice.

In last week's leader there was a reference to an article by Dr. E. G. West. The date as printed was 1952. It should have been 1942.

E V E N T S A N D C O M M E N T S

H 5 5

The Helsingborg exhibition was opened on Friday but I have not yet had a report of the proceedings. The British contribution was finished and photographed by Tuesday and was well ahead of any of the other national exhibits. My agents report that Italy and the United States have failed for various reasons to produce exhibits. The Swiss have produced an exhibition stand and not a furnished interior. The German interior is rather too full of clever ideas and the Japanese is likely to steal the show, as one might have expected. The British exhibit is said to look well but a little crowded, particularly, I imagine, when compared with Japanese austerity. I feel that Jo Patrick and the C.o.I.D. deserve warm congratulations for getting into action so quickly and smoothly. The operation was evidently very well planned.

The Scandinavian countries, according to my reports, had very little to show three days before the opening but this sounds like normal exhibition practice. I do not know what the weather was like on Friday but my agent wrote in a wintry spell of wind and rain.

The British detachment will be home next week and then we shall have some first-hand accounts, and some pictures.

A L U M I N I U M C E N T E N A R Y

Aluminium is one of the most versatile of materials but to me, at any rate, it has no endearing qualities. I am fond of cast iron in a sentimental kind of way because of railings, firebacks, early framed buildings and bridges. I like brass because of fenders, door knobs and old fire-engines. Silver and gold need no commendation. Copper, whether in its natural colour or turned green, is a pleasure to look at. Steel is immensely strong and reminds me of the swords of the mighty. Although aluminium is a more remarkable metal than all these, except perhaps gold, it has no charm. Its greatest attribute is its undoing. It is too light.

It would indeed be foolish not to be grateful for aluminium and it would be churlish to a degree not to pay tribute to its developers in its centenary year.

Aluminium, like plastics, is a portmanteau word covering a myriad alloys all so much alike to you and me and so completely different to those who know. You probably have missed the exhibition at the Royal Festival Hall. I nearly did so. It was a good exhibition.

It was well arranged and it was comprehensive. It showed that there is almost nothing that aluminium cannot do. On this score it could certainly be counted a success. Why, then, was I faintly dissatisfied with the exhibition? I think it was because I do not think it is possible to base an exhibition on a material which covers so many widely different fields in engineering, building and manufactured goods and to avoid it becoming a clutter of objects too big and too varied for any one mind to assimilate.

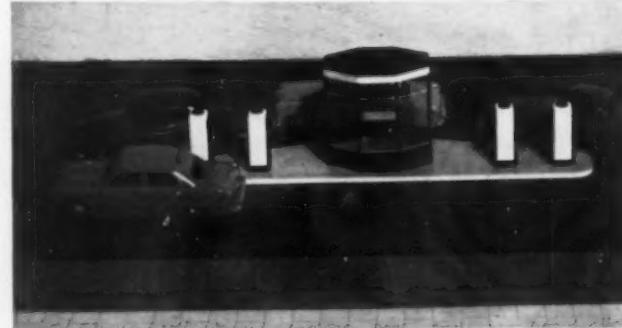
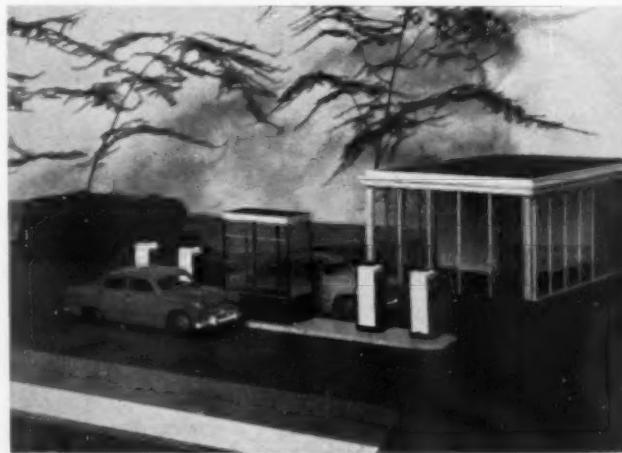
Clearly the exhibition had to be held, it had to impress the public by the widespread uses of the metal and in this it succeeded admirably. As a serious exhibition for designers and engineers it seemed to me to be less successful.

The Building section was as crowded as the rest and contained some interesting new ideas in windows and ven-

tilators among other things, but I understand that much had to be excluded for lack of space. I should think that "Aluminium in Building" might make an excellent exhibition at the Building Centre, and pass the idea to those concerned. I was particularly interested in a double-glazed, horizontally pivoted window which I saw. It looked a fairly expensive item but I imagine that it will be popular if the price can be made attractive.

It is dangerously easy to blame the material when one should be blaming the designer of the finished product. By this I mean that there is danger of aluminium getting a bad name because of the low design standard of many of the consumer goods which are made from it. Anodized finishes, on the whole, are too bright and textures too clumsy. In engineering, and particularly in the aircraft industry, the standard of design in aluminium is very high, the gap between engineering and consumer goods is most noticeable. Art in aluminium in its lowest form could be seen in a series of cast panels on the staircase and in some huge and monstrous compositions in cast and wrought aluminium near the information table. Surely this admirable utilitarian metal could be excused from taking part in such horrors.

Most impressive of the outdoor exhibits was a 170ft jib for a dragline. A prototype diesel car for British Railways was also on show. It was a neat, well-designed job with no frills and nonsense about streamlining. Next



to it was one of those beastly unpainted District Railway cars. Londoners are accustomed to moderately clean, shiny underground trains but are, I understand, to be given these dirty-looking silver objects because they are cheaper to maintain. I think that we are entitled to a better finish than this, and I think it is up to London Transport and the aluminium industry to see that we get it.

FILLING STATIONS

The practical results of the Shell-Mex & B.P. competition of a few years ago are published on another page. It is interesting to see that the company, through its architect, Mr. D. A. Birchett, A.R.I.B.A., has come down in favour of a 4in module. But since the structure and cladding are based on the Hertfordshire schools' development and were carried out by Hills (West Bromwich), this is not surprising. It seems a thoroughly sensible idea, not

only for the clients but also for Messrs. Hills. The architectural results are pleasant enough in the large Reading scheme, and it will be noted that it has evidently been decided not to give cover to customers' cars. This is in marked contrast to most Continental practice. It is true that the customer usually stays in the car and it is the attendant who gets wet. In the smaller schemes, however, the solution seems less happy. The kiosks look unnecessarily tall and boxy. I have an urge to tie the thing together with a roof over the pumps. No signs or lettering are shown on the models, but I do not think we need fear these as those already in use by this firm are among the best of their kind. (See facing page.)

Shell-Mex and B.P. are setting quite a high standard and I hope it will provoke keen competition with other oil companies.

A B N E R

NEWS OF THE WEEK

London Architecture Medal

The award of the R.I.B.A. London Architecture Bronze Medal for 1954 has been made in favour of the Achroydon Estate Wandsworth designed by the Architect to the London County Council, Dr. J. L. Martin, M.A., Ph.D. (Manchester), F.R.I.B.A.

City Architect : Short List

The post of Architect to the City of London will be filled by one of the following: Edwin George Chandler, A.R.I.B.A., A.M.T.P.I., City Architect, Oxford; Robert T. Kennedy, C.B.E., A.R.I.B.A., M.T.P.I., Ministry of Housing and Local Government; Sir Rat Johnson-Marshall, C.B.E., B.Arch. (Liverpool), A.R.I.B.A., Chief Architect, Ministry of Education; Hector J. W. Stirling, A.R.I.B.A., City Architect of Plymouth.

It is expected that the name of the successful candidate will be made known on June 23.

Birthday Honours

Baronetcy: Sir George Horatio Nelson, Chairman and Managing Director, the English Electric Company, Ltd.

C.H.: Henry Spencer Moore, Sculptor.

Knight Bachelor: William Emrys Williams, C.B.E., Secretary-General, Arts Council of Great Britain.

C.V.O.: Henry George Rushbury, R.A.

K.B.E.: Sir George Mowlem Burt, President, Federation of Civil Engineering Contractors.

C.B.E.: Keppel Archibald Cameron Creswell, for services to the study of Muslim architecture and archaeology; Reginald George Gosling, Chairman, Welwyn Garden City and Hatfield New Town Development Corporation; Cecil George Mant, Deputy Director General of Works, M.O.W.; Fleetwood Craven Pritchard, M.C., Chairman,

Pritchard, Wood and Partners, Ltd.; Harold Leney Raybould, Controller of Supplies, M.O.W.; Lister Philip Rees, Chief Technical Adviser, Central Land Board and War Damage Commission; Samuel Richard Walker, Chairman of the Reconstruction Committee of the Guildhall.

O.B.E.: George Lloyd Ackers, Chief Sanitary Engineer, M.O.W.; Henry Elliot FitzGibbon, Senior Housing and Planning Inspector, M.O.H. & L.G.; Stanley Baines Hamilton, Principal Scientific Officer, Building Research Station; William Frank Haslop, for services in the preservation of ancient buildings; Charles Edward Richardson, Chief Executive Officer, M.O.W.; Connolly Thomas Wilson, Managing Director, T. Wilson & Son, Ltd., Building and Civil Engineering Contractors, Northampton.

M.B.E.: Frederick W. Clark, Brickworks Manager, Richard Thomas & Baldwins, Ltd.; Walter Jones, lately Assistant Manager, Plate Glass Making Department, Pilkington Brothers, Ltd.; Ernest Henry Munnion, Managing Director, E. H. Munnion, Ltd., Builders, Sussex; Thomas W. Walker, Senior Executive Officer, M.O.W.

Glasgow Building Exhibition

The Building and Civil Engineering Plant Exhibition at Queenslie Industrial Estate, Glasgow, was opened by the Lord Provost on June 8. The exhibition is the largest of its kind ever to be held in Scotland and 27 per cent of the exhibitors are Scottish.

In his opening address the Lord Provost, Mr. Andrew Hood, advised building owners not to be too impatient to get the job started, but to allow the architect and contractor time to pre-plan and consider how best machinery and equipment could be used before they were brought on the site.

APPOINTMENT

Mr. Leslie William Lane, A.R.I.C.S., A.M.T.P.I., has been appointed Senior Planning Officer, L.C.C., in succession to Mr. Arthur Ling, now City Architect, Coventry.

Langham Draught Stabiliser

On page 483, in the Oil-Fired Heating issue of April 21, the Langham Draught Stabiliser attributed to Industrial & Domestic Heaters, Ltd., is, in fact, manufactured by Alfred Langham of 15, Copthorne Avenue, Harrow, Middx.

CORRESPONDENCE

Timber Supply

To the Editor of *A. & B. N.*

Sir,—I am desired by the National Softwood Importers' Section of this Federation to refer to the paragraph entitled "Timber Supply Notes" on page 637 of your May 26 issue in which it is stated that "most merchants have now brought their selling prices into line with replacement values of the new softwood to arrive in the coming months."

Whilst it is not easy to generalize on the question of timber prices nationally, it is quite clear that the statement concerned is not correct. In point of fact, prices now being obtained by U.K. Timber stockists and distributors are more in accord with replacement prices of October/November last year. Indeed, as stated in the May issue of the *Times Review of Industry*, "If replacement costs, now bearing freight additions, are to be met and reasonable trading profits maintained, softwood distributors must soon secure an increase in re-selling prices."

I am, etc.,

H. JOHN BOCKING,
Secretary,
The Timber Trade Federation of the
United Kingdom.

POINTS FROM

**The President's
Inaugural Address**

BRITISH ARCHITECTS'
CONFERENCE, HARROGATE

MR. ASLIN said: "First of all I must thank His Worship the Mayor most warmly not only on my own behalf but on behalf of all our members and guests for the generous welcome he has extended to us this morning. It is 18 years since we were the guests of the West Yorkshire Society of Architects when our Conference was held in Leeds. That Conference was a great success as I am sure this will be. Previous to that in 1929 we had a delightful Conference in the ancient and historic City of York when the York and East Yorkshire Society entertained us. To many of us it is coming home to gather in this county of broad acres and diverse interests.

But like many other things our annual conferences have changed in some respects. Our numbers are far greater than before the war—they are more representative in that we have not only architects in private practice but many delegates from local government from every part of England, Scotland, Wales and Northern Ireland. And we devote more attention to the serious side in organizing our meetings and discussions which I am sure is most valuable. But I still feel that the chief virtue of gatherings such as this is the bringing together of architects of every kind and the opportunity it gives for mutual talks both on and off the record either in the meeting room or in the hotel lounge and sometimes even at the bar. We discuss our mutual problems and realize once again if we ever forget it that we are all architects whether paid by fee or salary and all devoted to the profession and vocation which we have chosen—not because it is a wealthy and remunerative profession but because we think architecture is worth while in itself and demands the best that is in every one of us.

The Royal Institute is all-embracing and long may it continue to be so. We must at all costs preserve our professional unity and not divide into splinter groups each with a particular axe to grind. I can assure you with complete sincerity that the Council of the Royal Institute is ever mindful of the interests of all our members.

The theme of our discussions this year is "The Organization of the Building Industry and the Architect's Responsibilities," and we have been fortunate in securing Sir Thomas Bennett and Mr. Woodbine Parish to prepare the main papers, of which copies have been circulated to all the members, and Mr. Sheppard Fidler and Mr. Grenfell Baines to open the discussion. I am sure we shall all learn from what they have to tell us and from the debate which will follow to-day and to-morrow. I hope that mem-



Mr. C. H. Aslin, C.B.E., making his address

bers will join freely in the discussion. Then we can arrange for any points of substance to be referred for further consideration by our National Joint Consultative Committee of Architects, Quantity Surveyors and Builders.

But before I call upon Sir Thomas Bennett and Mr. Woodbine Parish to give short résumés of their papers I must express our great indebtedness to the West Yorkshire Society of Architects for all the hard work which has gone towards the organizing of this conference. Time does not permit me to mention all these hard workers by name but I must pay special tribute to Mr. Hubert Bennett, the President, and Mr. William King, the Honorary Secretary, for all that they have done.

Next I must say a special "thank you" to you, Mr. Mayor, and to the Harrogate Council for all the help you have given and for the generous hospitality and entertainment which you are providing. We are all looking forward with keen impatience to the civic reception which you are providing for us this evening.

Our grateful thanks are due to Her Royal Highness The Princess Royal for graciously consenting to be Honorary President of the Conference and also for allowing us to have the Garden Party in the wonderful setting of Harewood House. We are only sorry that Her Royal Highness cannot be present at any of our functions.

We must now get down to the more serious business, but before doing so I must call your attention to two exhibitions; that arranged by the West Yorkshire Society in this building and the Yorkshire Architects' Exhibition in the Art Gallery—both well worth looking at.

An Impression of the Conference

IT is always pleasant to look back on a successful event and a certain amount of spice is added if misgivings which were felt beforehand prove to have been unfounded. Not a few of the people who were at Torquay last year and at Harrogate this, must have wondered how Edward Mill's and Bill Allen's highly rated performance could have been repeated with equal success; by very different personalities, and on a subject which in many people's opinion was rather more difficult to grasp. The fact that the success was repeated is a tribute to Sir Thomas Bennett's great experience as an architect and ability on a platform, Mr. Woodbine Parish's "gospel according to St. David," the excellent lead to the discussion by Alwyn Sheppard Fidler and Grenfell Baines and the speakers who took part from the floor of the house in great numbers and in more lively fashion as a whole than at last year's conference.

There is not room here for a report on the discussion, that will appear in next week's issue; but let me tell you it did not concern itself solely with the ills of small house building and tea breaks as some daily papers would have us believe.

Thanks, no doubt, to those with cars being helpful in giving lifts, the rail strike appeared to have little or no effect on attendances. There were, I believe, 800 Conference members; and from the throng at the various social gatherings they must nearly all have been there. Architects and their wives from the north predominated (the W. Yorkshire Society has nearly 700 members) with representatives from local authorities an easy second place; followed by a sprinkling of architects from London and elsewhere, including Mr. and Mrs. John S. Gifford, an American architect and his wife from Pennsylvania, U.S.A.

Badges this year included a bar with the wearer's name; bars for the Conference executives were coloured pink instead of white. This made identification so much easier—but perhaps they ought to be worn on the back in order to cause the least embarrassment to the wearer!

For Londoners, the informal reception on the first night, none the less informal for names being announced and presidential hand-shakes, followed soon after the long drive up the Great North Road, where the pace was slower than normal by reason of the extra traffic.

At the inaugural meeting next day, the Conference was

welcomed by Councillor R. J. Riley, J.P., the jolly Mayor of Harrogate. Later we learnt he is an hotel owner in Harrogate and that his hotel had been left off the list prepared for Conference members. He told us that there was an exhibition of paintings by Yorkshire artists laid on in the Art Gallery for our benefit as well as the West Yorkshire Society's Exhibition of architectural work. The latter, by the way, proved quite the best arranged exhibition, and as good in quality as any I have seen yet in the provinces.

Mr. Aslin read his inaugural address (reported on the facing page), followed then by the first day's discussion of the papers, which was broken off at 12.30 sharp so that all could assemble in time for the afternoon's Garden Party at Harewood House.

I have been to five post-war Conference garden parties and each one has something to remember it by, in addition to the rain on most occasions. At Edinburgh it was penguins; at Canterbury the Red Dean shaking hands; this year it will be queues. The day of the garden party, by unwritten law falling on the second day of the Conference, coincided with one of Harewood's open days of which there are three a week; and at the time of the garden party, women belonging to some society or other began to arrive by the score in silver and mauve painted coaches. There were queues for everything. A long mixture of the women and Conference members formed in front of the entrance to the house and made a tour of the interior interminable, while a second queue for Conference members wanting tea led into a small marquee sited in an expanse of long grass facing the north front of the house. Fortunately, it only threatened rain from a sky completely overcast with cumulo-nimbus cloud or for the ladies it would have been no tea, or tea with very wet feet. I don't know why the grass couldn't have been cut.

The interior of the house from the little I saw of it was disappointing; containing a motley of some lovely things and others indescribably dull. Externally, the stonework is blackened with grime and gloomy; but the effect could be lightened, I think, if the window frames were painted white instead of some very dark colour. Barry's formal terrace garden on the south side looked cold and forbidding and the topiary work is mediocre. How much it could be improved by planting with bright flowers was evident from some water colours hanging in the house. The form of the 18th century landscaping is admirable;

The platform at the Inaugural Meeting (L to R). A. G. Sheppard Fidler, G. Grenfell Baines, Hubert Bennett, C. D. Spragge. The Mayor of Harrogate (and hidden by the Mayor, C. H. Aslin). Sir Thomas Bennett. D. E. Woodbine Parish.



An Impression of the Conference

and I liked the stables, which are more simple in style than the house.

The Royal Hall, cleared of its chairs and with a band on the platform in place of the morning's speakers, was transformed for the evening's Civic Reception and Dance; a warm and gay occasion.

The following morning all was back as before ready for the second day's discussion. That was as good if not better than on the first day and continued until one o'clock when it was reluctantly brought to an end with summings up by Sir Thomas Bennett and Mr. Woodbine Parish. A vote of thanks to the principal speaker was proposed by E. D. Jefferiss Mathews, O.B.E., Vice-President, R.I.B.A., and seconded by R. A. H. Livett, O.B.E., Leeds City Architect.

The final event, the conference dinner, was held the same evening at the Hotel Majestic which had served as

Royal Hall, Harrogate. Scene of the meetings, civic reception and exhibitions

P. B. Nash (L) Architect to Leeds Regional Hospital Board and R. J. Goddard of Rider Hunt & Partners with their wives at Harewood House

the headquarters of the Conference. Speeches on the whole were uniformly good without particular brilliance. After the loyal toasts, Hubert Bennett proposed the Borough of Harrogate and was responded to by the Mayor, Councillor Robert J. Riley; the R.I.B.A. was proposed by the Bishop of Ripon and responded to by Mr. Aslin, President; the guests were proposed by Kenneth Cross, Hon. Sec., R.I.B.A., and responded to by Sir James Croysdale, Lord Mayor of Leeds.

In his speech, Mr. Aslin let down a little hair when he said: "The R.I.B.A. has no intention (as far as I am concerned) of having any form of trade union inside the R.I.B.A." He thought that the young men who wanted this kind of thing did not realize that unions were out of date, anyway.

Judged by the standard of the others, it was a good conference, and, in the opinion of the President, one of the best he had ever attended.

GEORGE MANSELL

C. H. Aslin and his daughter leaving Royal Hall after the first day's meeting

Mrs. Jensen leaving the tea marquee at the garden party accompanied by Rolf Jensen, Borough Architect for Paddington and Charles Richards, who represented the War Office





From south-west. The main entrance is to left

EALING TECHNICAL COLLEGE AND SCHOOL OF ART EXTENSION for Middlesex County Council

C. G. STILLMAN, County Architect

R. J. BUNCE, Area Architect

B. S. ROBERTS, Assistant Architect

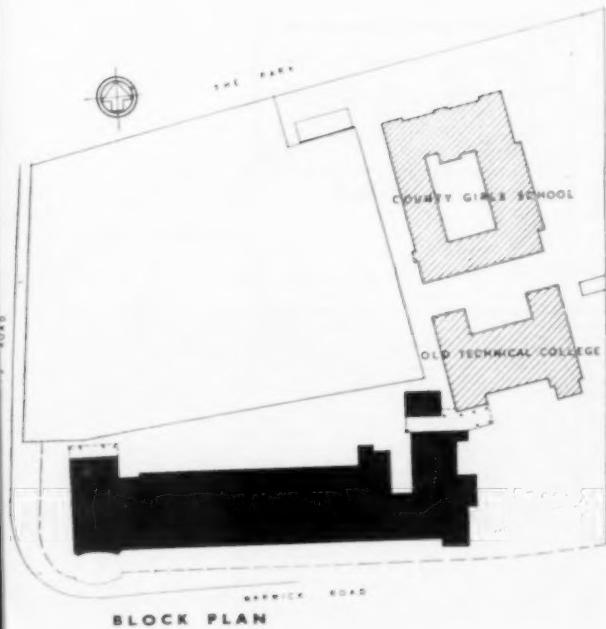
E. F. STRONACH, Assistant Architect

THE college is bounded by St. Mary's Road on the west and Warwick Road on the south. To the north are the gardens of the Vicarage and the existing college is on the east. Although Warwick Road is residential, it carries a considerable volume of heavy traffic and there is a project for widening both roads.

The foundations of an earlier scheme laid down before the war incorporated a basement subsequently adapted and used as an air raid shelter. After the war the schedule of accommodation was extended and modified but the buildings had to conform to the existing foundations. The eastern end of the site is left vacant for future development.

Accommodation

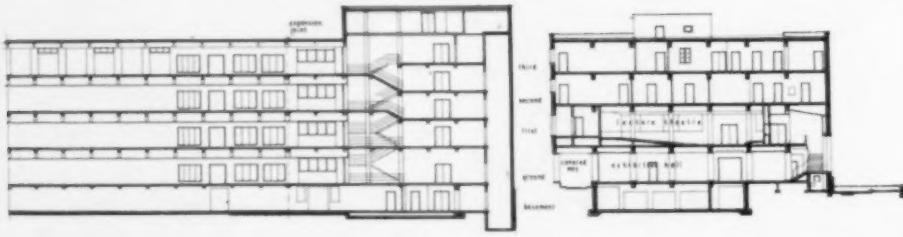
To meet the additional requirements of the post-war scheme, an extra floor was added to the main block. The heating chamber and fuel store are under the car park and the basement contains maintenance workshops, stores, switch and battery rooms, cycle store, etc. The ground and upper floors contain two entrance halls (one large



[Continued on page 716]



Front elevation with windows to exhibition hall under colonnade

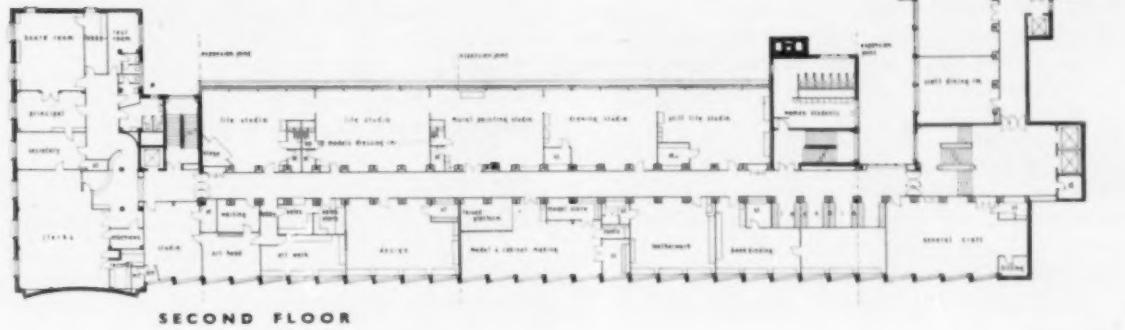


SECTIONS

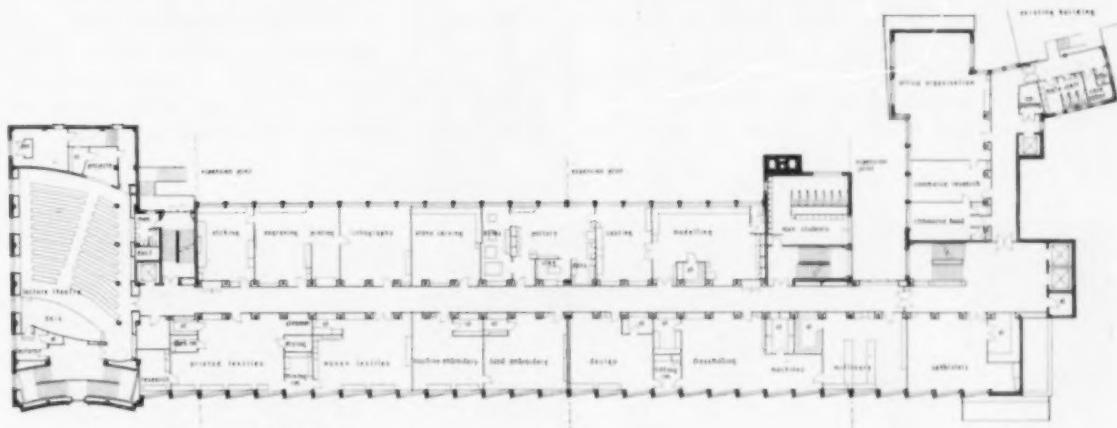
General Contractors:—Prestige & Co. Ltd.

Sub-Contractors

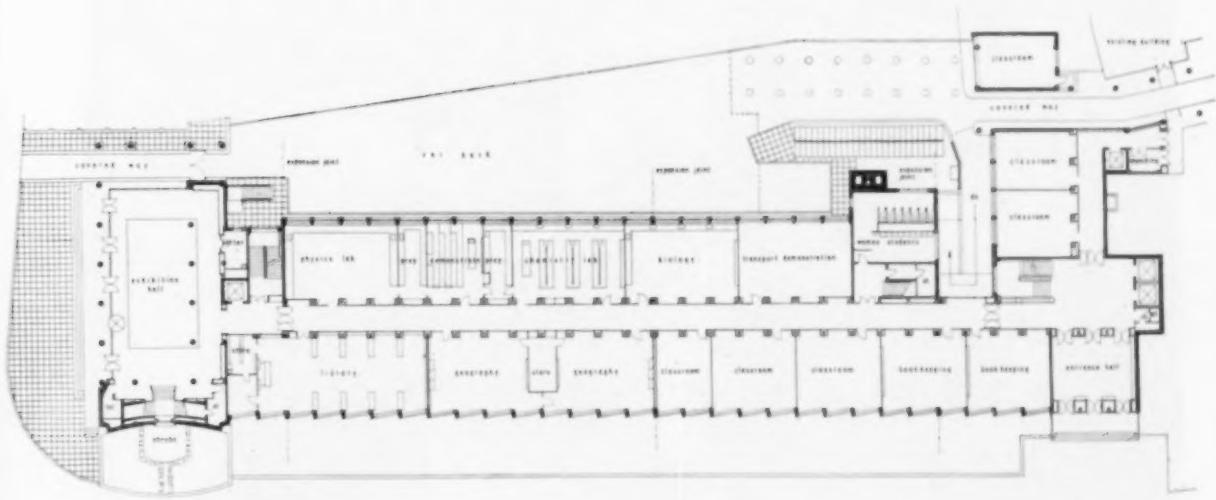
Adjustable Lowers: W. H. Colt (London) Ltd.; Roberts Adlard & Co. Ltd. **Anti-Vibration Mountings:** Silentbloc Ltd. **Artificial Clipsham Stone & Granite:** The Liverpool Artificial Stone Co. Ltd. **Ash Hoist:** G. Johnson Ltd. **Asphalt:** Highways Construction Ltd.; Brights Asphalt Contractors Ltd. **Batteries and "Kepalite" Plant:** Chloride Batteries Ltd. **Boilers:** Hartley & Sugden Ltd. **Bricks—Facing:** Finnis, Ruait & Nicholls Ltd. **Cellar Flaps:** Luxfer Ltd. **Coat Hangers and Hooks:** Clark Hunt & Co. **Cupboard Units:** D. Burkle & Son Ltd. **Curtain Tracks:** Lockerbie & Wilkinson Ltd. **Damp-proof Course:** G. M. Callender & Co. Ltd. **Drinking Fountains:** T. A. Harris Ltd. **Electric Clocks:** Gent & Co. Ltd. **Electrical Installation:** Electrical Installations Ltd. **Electric Lifts:** Waygood-Otis Ltd. **Enquiry Desk:** D. Burkle & Son Ltd. **External Colorcrete Rendering:** Campbell Horne & Co. Ltd. **External Tiling:** F. & E. Eastman (England) Ltd. **False Letters in Bronze:** James Gibbons Ltd. **Fire Alarm Equipment:** Julius Sax & Co. Ltd. **Flag Staff:** J. W. Gray & Son Ltd. **Flush Doors:** D. Burkle & Son Ltd. **Framing and Glazing to Showcases:** A. Edmonds & Co. Ltd. **Handrails and Gates:** William Pickford Ltd. **Hanging Hot Water, Gas and Ventilating Installations:** Frewell Heating Co. Ltd. **Heavy Fuel Stove Covers:** Adams Hydraulics Ltd. **Ironmongery:** James Gibbons Ltd. **Korkoid & Cork Flooring:** Korkoid Decorative Floors Ltd. **Laboratory Fittings and Lecture Theatre Seats:** Soto Sotos Ltd. **Library Fittings:** Walker Symmonds Ltd. **Lighting Circuits:** R. C. Cuttings & Co. Ltd. **Lighting Fittings:** General Electric Co. Ltd.; Holophane Ltd.; Fredk. Thomas & Co. Ltd.; Benjamin Electric Ltd.; Merchant Adventurers of London Ltd.; Mek-Elec Engineering Co. Ltd.; Rayco Electric Co. Ltd.; British Thomson-Houston Co. Ltd.; Lucas Hume Atkins & Co. Ltd.; Falk Studeman & Co. Ltd. **Low Voltage Plugboards and Boxes:** Unitec Astro Switchgear Ltd. **Main Switchboards:** Parmiter, Hunt & Sugden Ltd. **Metal Door Frames:** Fredk. Braby & Co. Ltd. **Metal Windows:** John Thompson Beacon Windows Ltd. **Paint, Letters, Paint & Varnish Co. Ltd.:** Painting to Car Park: W. & J. Glossop Ltd. **Paving Slabs:** F. Bradford & Co. Ltd. **Plumbing:** Richard Audrey Ltd. **Private Automatic Exchange and Staff Location System:** Standard Telephones and Cables Ltd. **Precast Concrete Slabs:** Conallcrete Ltd. **Precast Concrete Windows:** J. A. King & Co. Ltd. **Precast Curbs:** Western Bros. Ltd. **Precast Stone Stars:** W. S. Try Ltd. **Revolving Blackboards:** Wilson & Garden Ltd. **Revolving Door:** Fredk. Sage & Co. Ltd. **Room Labels and Numbers:** London Name Plate Manufacturing Co. Ltd. **Sanitary Fittings:** Adams Ltd. **Semantic Tiling:** Horsley Smith (Hayes) Ltd. **Showcases:** A. Edmonds & Co. Ltd. **Steel Cycle Stands:** Alfred A. Odins & Co. Ltd. **Steel Doors:** James Gibbons Ltd. **Steel Ladders:** Clark Hunt & Co. Ltd. **Stone and Travertine:** Anselm Odling & Sons Ltd. **Structural Steel:** Boulton & Paul Ltd. **Studio North Lights and Skylight:** Standard Patent Glazing Co. Ltd. **Suspended Ceiling Lathing:** W. H. Colt (London) Ltd. **Terrazzo:** Terrazzo & Tile Products Ltd. **Toilet Roll Holders:** R. Sculthorpe & Co. Ltd. **Topskin to Fabric Printing Benches:** MacClelland Engineering Co. Ltd. **Ventilated Spray Booth:** Aerograph Co. Ltd.; Nye & Langston Ltd. **Ventilation to Fume Closets:** Nye & Langston Ltd. **Water Closet Partitions:** Venesta Limited. **Window Balconies:** Adrian Stokes Ltd. **Wood Handrailing:** F. J. Lewis Ltd. **Wood Block Flooring:** Horsley Smith (Hayes) Ltd.



SECOND FLOOR



FIRST FLOOR



GROUND FLOOR

Ealing Technical College Extension

[Continued from p. 713]

enough for exhibitions), library, science laboratories, classrooms, craft rooms, art studios, photographic workrooms, dark rooms and studios. There are also administrative offices, a board room, staff and students common rooms and a caretaker's flat.

Construction

The structure is a reinforced concrete frame with the exception of the additional floor which is an R.S.J. portal frame with asbestos cement decking to the roof flat. The cavity walls have 4½in brick facing and 9in brick behind. The main partitions are 4½in brick.

Services

The heating system is low pressure accelerated hot water fed by coke fired mild steel Metropolitan boilers. The lecture theatre and the dark rooms are mechanically ventilated.

Generally there is a duct over each corridor with vertical ducts to columns on either side of the corridor.

The main switch room in the basement feeds sub-main

boards vertically over one another in recesses at ends of corridors. All fuses and controls are incorporated in these sub-main boards.

There are four lifts, one being a goods-passenger type available for the caretaker's flat. Two are duplex type interconnected to one set of control push buttons.

Finishes

The St. Mary's Road elevation is in 2½in hand-made sand faced multi-coloured Buckinghamshire facings, travertine window surrounds, Clipsham stone coping, precast terrazzo casings to columns and artificial granite steps. The Warwick Road front is in dark red colorcrete with 1in travertine vertical strips. The plinth is of artificial granite. The remaining elevations are either facing bricks or colorcrete with artificial stone window dressings.

Internally the finish is either fair face brick or plaster. The floor finishes are wood block with wide granolithic margins in craft rooms; Semtex tiles in classrooms, and corridors are Korkoid tiles with granolithic margins.

Entrance hall cloister with display cases on walls





1 2

3 4

1. Studio

2. Entrance hall

3. Reception desk

4. Lecture hall

5. Staircase linking classrooms with cloakrooms

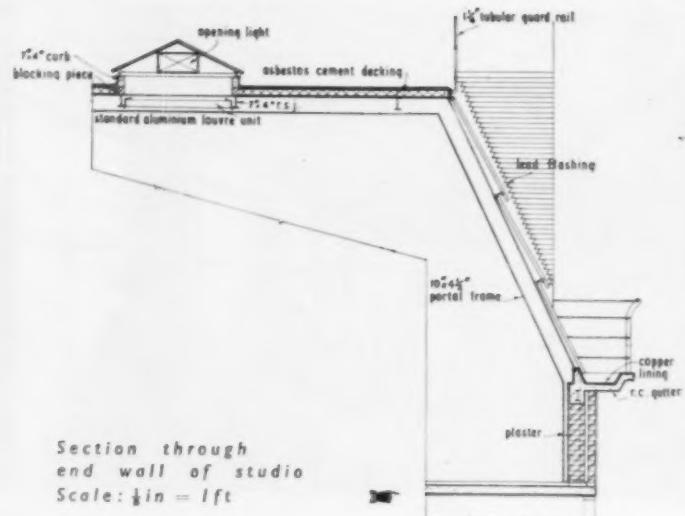


Ealing Technical College Extension

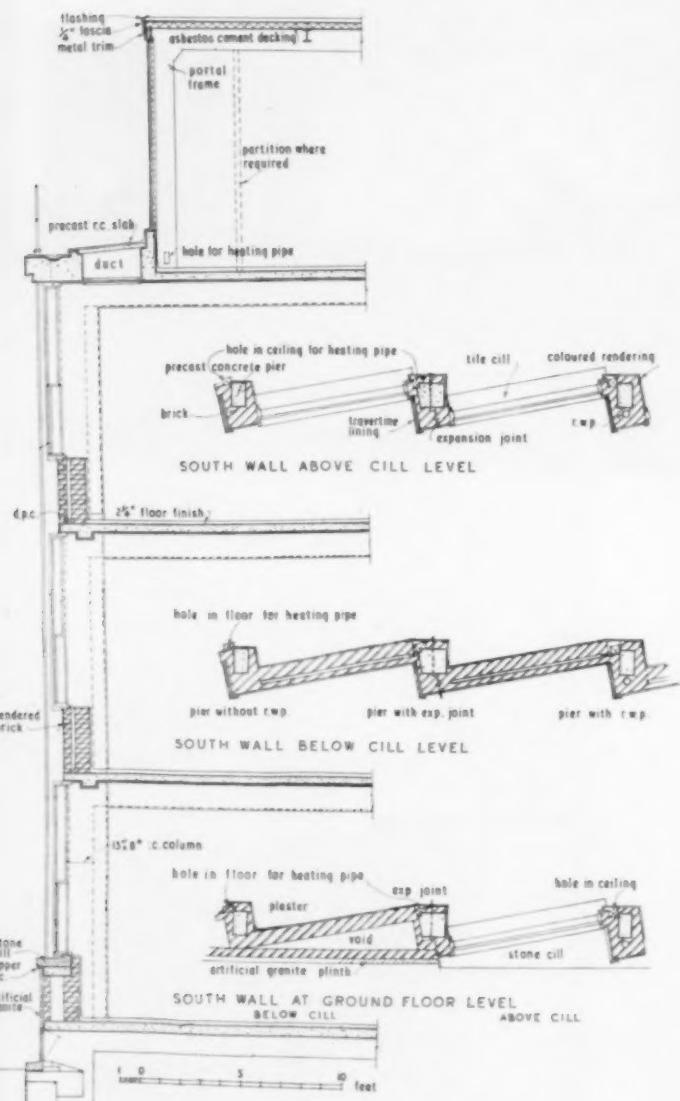


Detail of south front wall

Students entrance south front



Section through
end wall of studio
Scale: $\frac{1}{8}$ in = 1 ft





New Model Service Station, Reading

D. A. BIRCHETT, A.R.I.B.A., Company Architect, Shell-Mex & B.P. Ltd.

P. J. WEBB, A.R.I.B.A., Assistant Architect

in collaboration with WALLIS GILBERT & PARTNERS

Assistant in Charge: JOHN WARE, F.R.I.B.A.

Assistant Architect: MICHAEL WOLSTENHOLME, A.R.I.B.A.

UNTIL about three years ago few in this country had gone back to first principles in considering the design of service stations. Some of the earliest work of the Shell-Mex & B.P. architectural section, which was set up in 1951 under D. A. Birchett, A.R.I.B.A., was research with model service station forecourts and vehicles to find out the best layouts for safe and convenient ingress and egress and the proper siting of petrol pumps. As dealers began to come in to the Company's "selected representation scheme" sound advice was given to them on the replanning of their forecourts for convenience and safety as well as on remodelling the premises themselves.

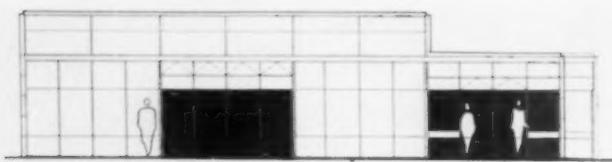
At the same time consultant architects were appointed, in collaboration with the Royal Institute of British Architects, in each of the Company's nine divisions, and to their associated companies, Scottish Oils & Shell-Mex, Ltd., and Irish Shell, Ltd., to assist the dealers who retailed the Company's products.

While continuing to give advice on the reconstruction of existing premises, the Company were looking for the

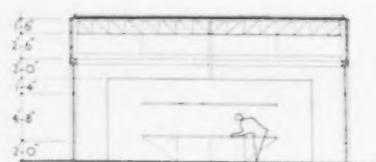
best architectural solutions to the garage problem to assist the trade as rapidly as possible. To this end they sponsored a competition, with the support of the Royal Institute of British Architects and the Design and Industries Association, for the design of garages serving typical national needs and awarded a number of prizes. Over 500 architects entered for this competition and praiseworthy designs emerged.

The Company's architectural section carried out further experiment and research, specifically into the filling station and service station problem, finally evolving the new system of modular design. The first station built to the new designs, The Reading Service Station, just completed and a number of others will be finished in the course of this year. Thereafter a growing number of these new model stations will be seen along British roads as part of the development of the service station trade which the Company are fostering.

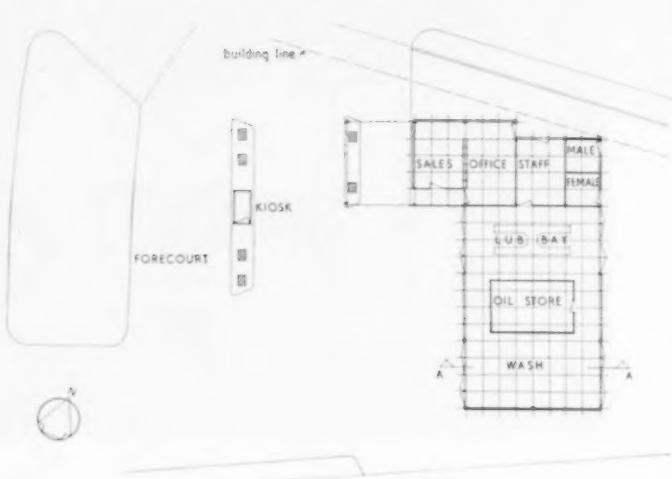
The designs employ a 4in module and a 4:40in planning grid. The structure basically consists of a simply



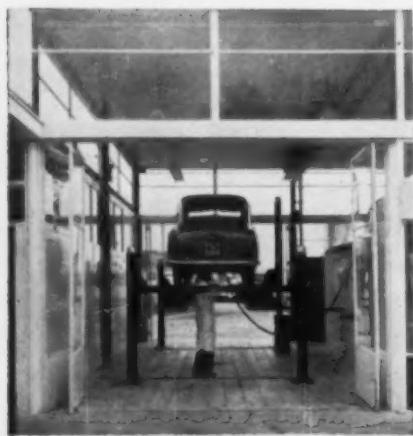
NORTH EAST ELEVATION



SECTION AA



PLAN



The President of the R.I.B.A., Mr. C. H. Aslin, C.B.E., will open this new Service Station this afternoon. Sponsored by Shell-Mex & B.P. Ltd. and designed by their staff architect, the new station marks another step in the development of modular co-ordinated buildings. The construction is an adaptation of the system developed for the Hertfordshire schools under Mr. Aslin's direction as County Architect.



Night view of New Model Service Station, Reading

framed building with stanchions and beams at economic centres and spans. Curtain walling by a series of inter-related steel framed panels of the type pioneered by the manufacturers, Hills (West Bromwich) Ltd., and used in many of the new schools, particularly in Hertfordshire, are then simply fixed to the framing. The panel framing may be filled with glass (clear, opaque, textured, or coloured) or with sheet steel or aluminium stove-enamelled to any desired colours. Both panels and glass can readily be modified to allow for increased thermal insulation.

The standard panel is 8ft 0in high, but walls may be constructed to any height by using multiples of the basic unit or by the introduction of other panels within the standard range. The range is limited to as few units as possible in order that complexity in production and costs may be kept to a minimum.

Local and traditional materials may be introduced into individual designs by incorporation within certain panels or by use as solid walling in the usual manner on certain elevations.

The roofing insulation consists of 3in woodwool slabs laid dry between light steel secondary beams. The underside of the roofing is covered with a ceiling lining of stove-enamelled perforated hardboard. Between the lining and the underside of the woodwool slabs sufficient space is provided for the electrical conduit and other service lines to run concealed from view. The weather roofing consists of three layers of bituminized felt laid on a cement screed.

A feature of the design is its extreme flexibility.

The simplest possible building made from the standard parts is a four- or six-sided kiosk. This, placed on an island with pumps each side, forms a complete trade unit.

The kiosk can also be made hexagonal or octagonal (the panels can be fitted together at any angle) or can be expanded into a rectangular building of any desired number of standard 3ft 4in panels along each side. The larger kiosks with pumps and pump island can form complete merchandising units comparable to a lock-up business. Once a building of any size has been completed

it can be expanded according to the needs of expanding trade.

The simplest building likely to be found in actual practice on a new site with a fairly small trade forms a rectangle of 26ft 8in × 16ft 8in (together, of course, with a forecourt and pump island or islands): this gives space for an office, staff rooms, showroom, and toilets.

The next most usual plan (which can be added to the first) consists of the preceding unit with the addition of a lubricating bay, washing bay and oil store.

Larger still is a building consisting of the accommodation in the two preceding groups with workshop extensions.

It should not be thought, however, that all stations will be built entirely on these standard plans. Indeed, there is likely to be infinite variety. With the use of the same basic units practically any shape or size of station can be constructed to suit sites of awkward shape, or sloping sites, or to cater for special requirements.

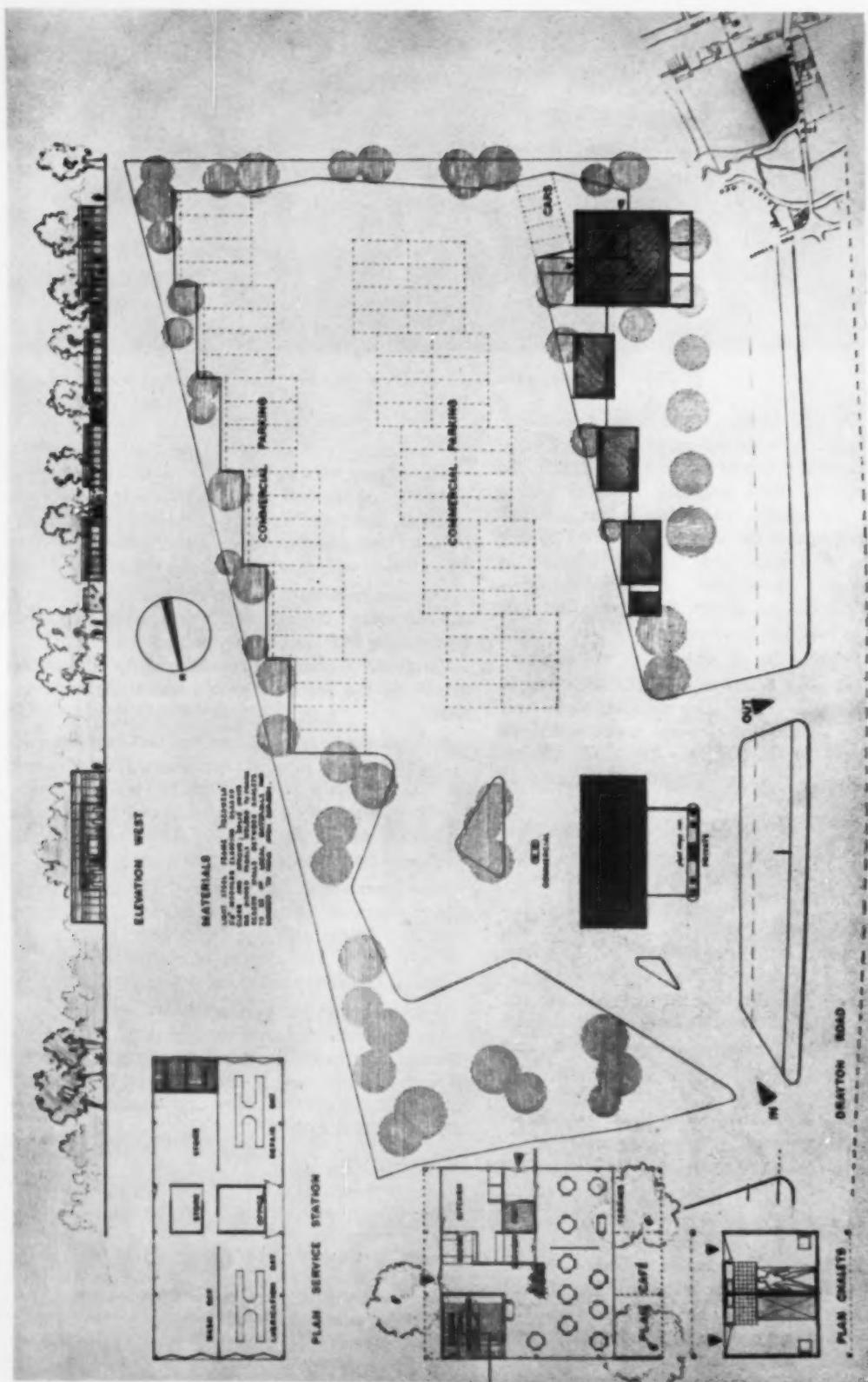
Plans have already been drawn, for example, for an isolated station on a main road to include two flats on an upper floor for the staff. Another scheme includes a café for lorry drivers and a series of chalets for overnight accommodation for long-distance drivers. (*See overleaf.*)

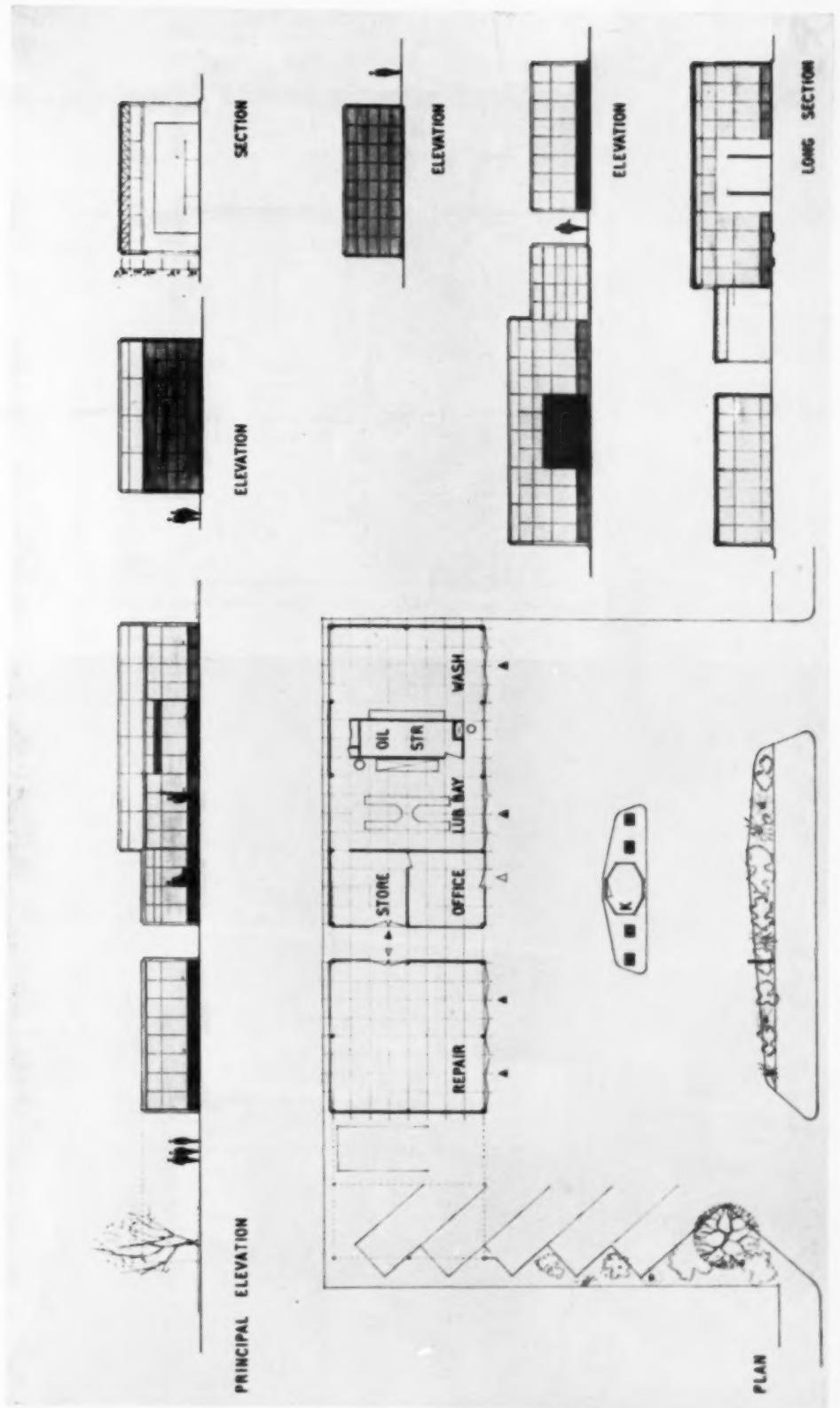
All these stations will unmistakably belong to the same family—the Shell-B.P. family—and motorists will have no difficulty in recognizing them. In siting the station due regard will be paid to existing natural features and, as has been stated, the building may incorporate certain elements in local materials.

GENERAL CONTRACTORS:

FRANCIS BROS., LTD., TILEHURST, READING

Sub-Contractors—Structure and cladding: Hills (West Bromwich) Ltd. Internal partitions and linings: Internal Constructions Ltd. Electrical and heating installations: Rashleigh Phipps & Co. Ltd. Light fittings: Crompton Parkinson Ltd. Tile flooring: E. J. Elgood Ltd. Floor coverings: The Adamite Co. Ltd. Paints: International Paints Ltd. Sanitary fittings: John Bolding & Sons Ltd. Petrol pump installation: Pump Maintenance Ltd. Oil storage tanks and lubrication equipment: Weavers Ltd. Oil dispensing equipment: Avery Hardoll Ltd. Car Hoist: Joseph Bradbury & Sons Ltd.





PROPOSED SERVICE STATION, CHELVESTON

TWO OF THE NEW DESIGNS BY THE SHELL-MEX AND B.P. ARCHITECTURAL SECTION

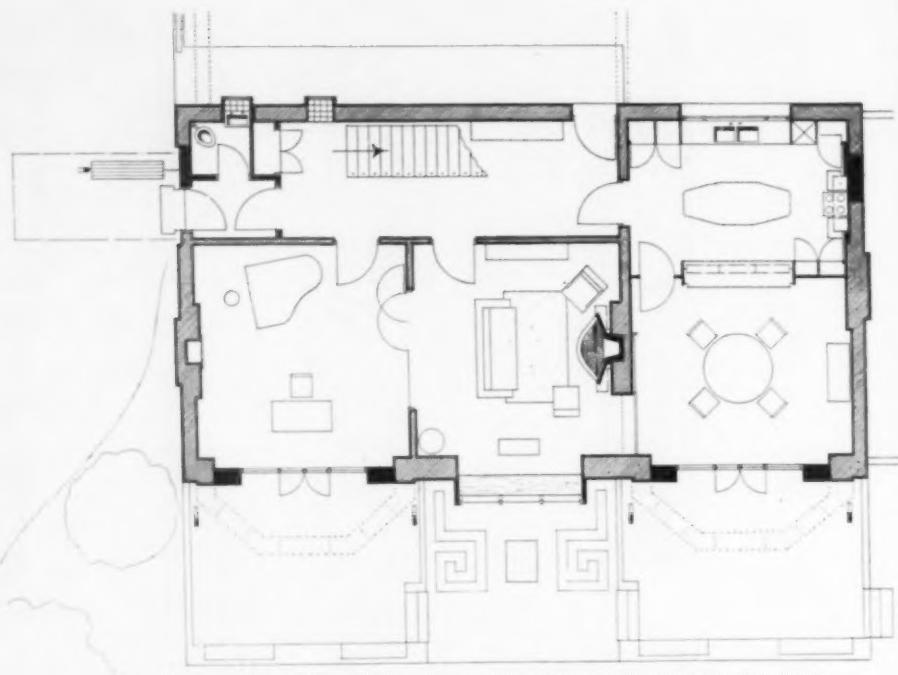
Company Architect: D. A. BIRCHETT, A.R.I.B.A.



The original house

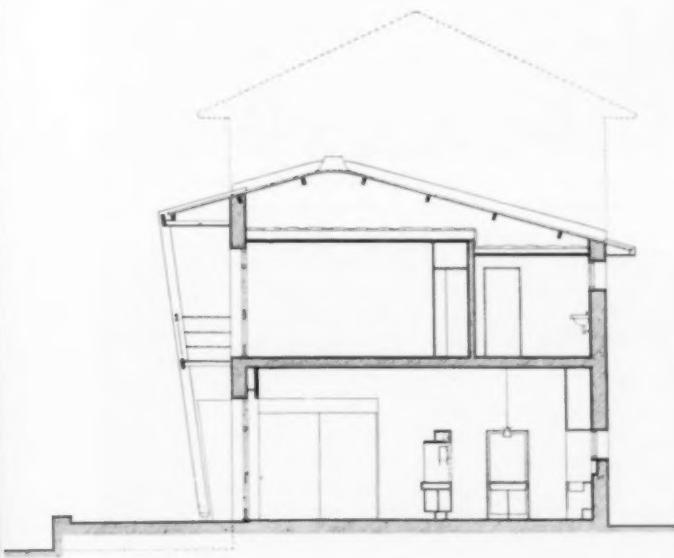
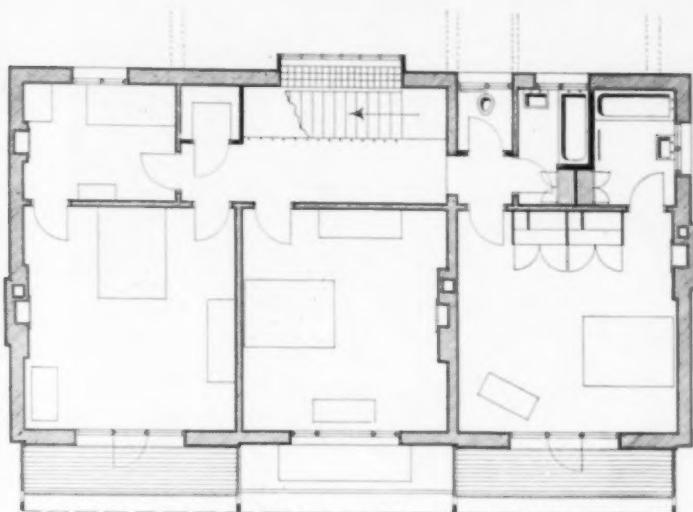
House at Blackheath

ARCHITECT :
PATRICK
GWYNNE



Plans and section. Scale: 1 in = 12 ft. New work shown solid black





THE original early Victorian house had been bombed to a shell when the present owner took it over. The assets were a well-matured garden, with fine shrubs and some specimen trees, and the carcase remaining from a house with well-proportioned rooms. It was decided to dispense with all the ruined portions at the rear and not to rebuild the missing third floor. Within the limits of the main block—about 50ft by 28ft, two storeys high—a new house has been formed.

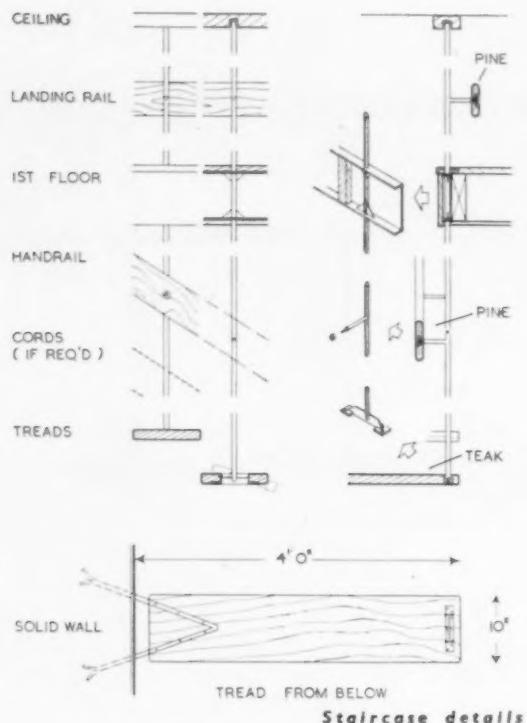
The present plan keeps largely to the original walls and uses the old window and door openings. A small cloakroom has been gained from the original wide vestibule space thereby reducing the scale of the entrance to suit the smaller new interior; an opening has been cut to con-



The south elevation



The new main entrance



nect sitting-room and dining-room, and a pair of bathrooms and w.c. have been inserted on the first floor. Apart from these the only structural changes have been the

removal of two large bay windows from the garden side and the introduction of a lowered ceiling over the sitting-room to give relief from the very high—11ft 6in—ceilings.

Partly because of the high ceiling it was decided to let the dining-room and kitchen be a combined space with only a visual division. A rather formally arranged screen wall and hatchway provides a sideboard and dresser in one and is fitted on the kitchen side with a built-in blind to close off the view when required. Draughts are avoided and privacy ensured in this room by making the garden door and back door do double duty, and this also allows the kitchen proper to remain as a work space without the interruptions of traffic. This arrangement, together with the folding doors which open up the study, provides a relatively "free" plan but one which maintains the identity of each of the rooms.

The new roof to the house has been formed of slate-coloured asbestos sheets of a type first introduced for one of the "prefab." houses (Arcon permanent house—not continued, I think), and which employ a curved-ridge section. The roof, which is lower at the back than at the front, is brought forward to an eave overhanging about 5ft to keep summer sun out of the bedrooms. This overhang is carried by the canted posts which also support the bedroom balconies, the latter, in turn, giving a degree of sun shade to the ground floor. The gutter is hidden behind a timber fascia and rainwater is led within the soffit to a down pipe on the side wall.

The staircase, which replaces a former one in the same position, is constructed of teak treads carried from the wall at one side and at the other by a single tube hanging from a steel channel fixed to the first-floor timbers. A pine

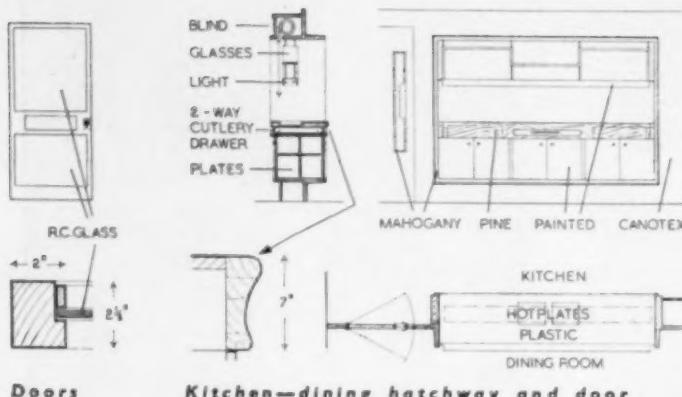




The kitchen showing hatch-sideboard

The living room



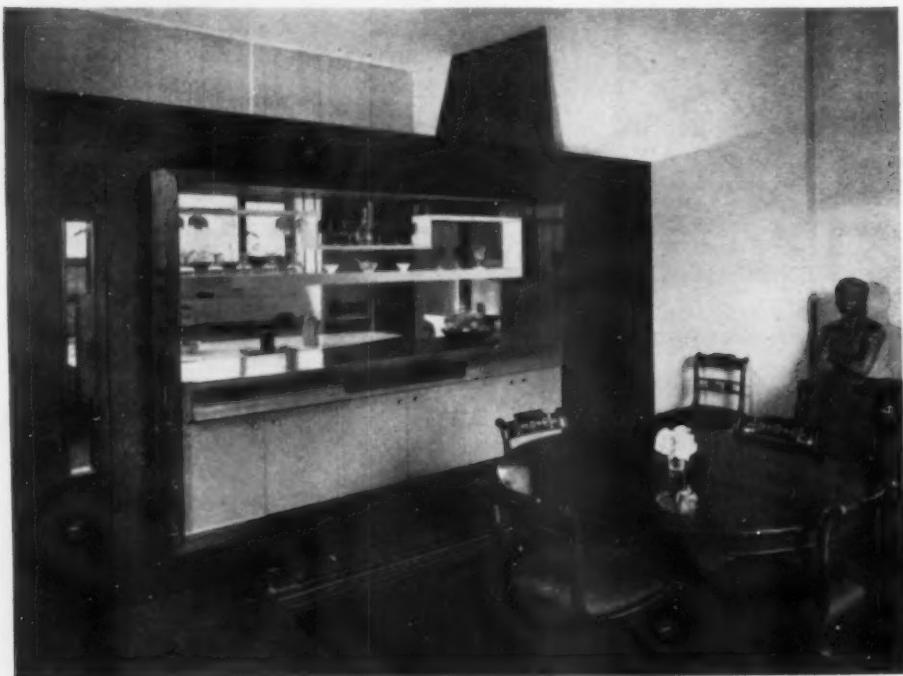


House at Blackheath

ARCHITECT:
PATRICK Gwynne

LIST OF CONTRACTORS

Main contractor: Leslie Bilsby, Ltd. Roofing: Turners Asbestos Cement Co. Ltd. Steel Windows: Williams & Williams, Ltd. Electrical: F. Rogers, Ltd. Terrazzo Fireplace: Liverpool Artificial Stone Co. Ltd. (All joinery, fittings, special furniture by main contractor.)



handrail in about 6ft lengths also acts as a tie between the tubes. The tubes are carried up to the first-floor ceiling to provide a balustrade to the landing.

The fireplace in the sitting-room is formed of precast terrazzo mantel-shelf and surround which are designed to give emphasis to the otherwise small and austere appearance of a slow-burning grate.

The glazed doors in the house have been specially designed with frames only 2in wide to give a more elegant appearance than is usually possible with 4in styles. The depth of the frame is increased to 2½in and the door also relies for stability on the wired roughcast glass. Mortice locks are given housing in the wide cross rail.

Windows throughout are fixed wooden sections with

standard steel casements and french doors inserted where opening light was required.

Floors are 6in red quarry tiles in hall, kitchen and dining-room, with blockwood in sitting-room and study, and close-fitted carpets upstairs.

The exterior is rendered front and rear and painted a very pale yellow, with all trims and balconies in white. Window frames are in two shades of grey. Soffit is light blue. Side walls are the original stock bricks.

The marble and steel frame coffee table in the sitting-room and the light fitting in the kitchen were designed by the architect.

The owner of the house, Mr. Leslie Bilsby, is a building contractor, and his own firm carried out all the work.

CONSTITUTION OF THE R.I.B.A. COUNCIL

DOES the R.I.B.A. Council reflect the composition of the general body of members adequately? Are the 10,641 Associates under-represented? These questions have been mentioned on a number of occasions by members but were openly expressed in the early part of 1954.

The R.I.B.A. Council wisely agreed at their meeting on May 4, 1954, to set up a committee to examine the whole question and to make recommendations. Those of us who read this short announcement in the minutes wondered if the setting up of a committee would mean that it might be a number of years before we would hear any further news on this subject. When we did hear that the report had been completed one wondered if it would be pigeon-holed?

What would be the constitution of the committee was a question asked. Would the committee be appointed in the proportion of membership of the R.I.B.A.? Would the contents of the report and recommendations be made public?

All these questions have now been answered. The report and recommendations are printed in the R.I.B.A. Journal. Whilst the constitution of the committee was not on proportional representation numerically, as there were 7 Fellows, 3 Associates and 1 Licentiate, it comprised a cross-section of all branches of the profession, the Hon. Secretary of the R.I.B.A., the Hon. Treasurer, Chairman of the Allied Societies' Conference, a member in private practice, a member in official practice, an Associate and a Licentiate member of the Council, the chairman of the Salaried and Official Architects' Committee, a representative of the R.I.A.S., a representative of the Overseas Allied Societies and a Representative of the A.B.T. on the Council. A very fair cross-section.

The terms of reference were, "To review the recent constitution of the R.I.B.A. Council in all its aspects and to report in particular on the following questions:—

1. (a) Is it representative of the various classes of memberships? If not should it be?

(b) Is it representative of the various sections of the architectural profession? If not should it be?

(c) Should any change be made in the system of representation of the Allied Societies?

(d) Should any change be made in ex-officio representation?

2. Should any change be made in the system of classes membership of the R.I.B.A.?

3. To consider the effect of any recommendations arising from the above as to the election, tenure of office, etc., of the Council.

4. To make recommendations to the Council on all these matters."

The report has been considered by the Council and they wish to emphasize their complete approval of the views expressed by the Committee to the following effect:—

"There is a tendency, fortunately not widespread, to regard the Profession as composed of sections whose interests may come into conflict. They do not subscribe to this opinion. They regard the profession as a single entity composed of members whose ultimate interests in the advancement of architecture are identical. Sectional representation on the Council is neither necessary nor desirable, but the Council should be informed of the points of view of the various categories of membership."

No one will, I hope, quarrel with this statement. The only point which might be queried is how the Council could obtain the points of view of the various categories of membership unless they had fair representation.

On the question of membership the Committee first considered the controversial class, Licentiate-ship. They are to be congratulated on not beating about the bush but recommended that from December 31, 1955, further admissions to the Licentiate-ship be discontinued! The R.I.B.A. Council approved this recommendation.

The reform should now remove, as the years pass, the reasons why many Associates did not apply for Fellowship.

Some interesting statistics are given by the Committee in their section dealing with Fellowship in relation to Associateship. The proportion of Fellows to Associates is 1 to 5.7. The average in other comparable professional institutes is 1 to 3.4. The Committee point out that this disproportion is of recent origin, caused by influx of Associates since the war. In 1945, the proportion was 1 to 2.6. Since 1945, the Associateship class has more than doubled in number.

How many, one immediately asks, of these Associates are at present eligible to become Fellows if they wish? The Committee estimate 1,150 or 10%.

It is pleasing to note that the Committee considered the criticism which has been made on occasions that the Fellowship class has a back door which has allowed an undue proportion of members not qualified by examination

to enter. The statistics provided in the report on this point are interesting and enlightening: 1,357 or 65.87% Fellows were first Associates; 427 or 20.75% qualified by Licentiate-Fellowship Examination (Design); 86.6%, the report points out, have been subject to some form of examinations! 13.4% have not. The Committee considered that these statistics disprove the criticism. This is correct to a certain extent, but I have no doubt some will criticize the true value of the Licentiate-Fellowship Examination (Design) as compared with graduating via Associateship. With the education of Licentiate-ship this means of becoming a Fellow will cease.

As those members of the R.I.B.A. who have studied their membership booklet will know, an Associateship may apply after seven years of experience in a position of responsibility for Fellowship. This operated in favour of principals in private practice who could proceed to Fellowship without any form of examination but operated to the detriment of salaried architects. For some unknown reason it was rarely felt that they occupied a position of responsibility for the design of architectural work. Architects in salaried positions will be pleased to note that the Committee were of the opinion that the term "position of responsibility" was at present too rigidly interpreted and that some wider interpretation should be given to place salaried architects on a more equitable footing with principals in private practice.

The recommendations and extensions thereto approved by the Council would be easier grasped if divided into sections, and this I propose to do.

(a) In future admission will only be open to two classes of corporate membership, Associateship and Fellowship.

(b) The Fellowship to be regarded in the nature of a senior section of the Royal Institute composed of persons qualified by age, ability and experience in responsible position in the practice of architecture.

(c) Associates engaged in other work may be regarded as eligible for the Fellowship if in the opinion of the Council, their position and attainments make it desirable.

(d) All candidates without exceptions be required to submit to the Fellowship Examiners drawings and photographs or other examples of work, and to attend for an interview which may, however, be dispensed with at the discretion of the Examiners.

(e) The new procedure for election to a Fellow comes into force on January 1, 1956.

(f) After January 1, 1956, Associates proceeding to Fellowship will not be required to pay an entrance fee (present fee £5 5s.).

The next point considered by the Committee was the constitution of the Council. The present composition is set out, but in a rather misleading light. I would quarrel with the word "present."

Two propositions were considered:

(1) That an insufficient proportion of the Council were elected by a strictly democratic process.

(2) That the composition of the Council did not properly reflect the composition of the general body. Associates being particularly under-represented.

Regarding the first point the Committee point out that 33 members are elected by ballot and 30 are elected or appointed by the Allied Societies. They saw no reason to alter this position, but I am pleased to note, referred the question of Allied Societies' representatives to the Allied Societies Conference for consideration with a view to obtaining assurances that these appointments were in fact able to be influenced by the wishes of the general body of members of each Allied Society.

On the second point the Committee thought that there was more substance in the contention that opportunities for Associates to be elected to the Council were unduly limited in regard to the size of the Associateship class.

Two suggestions were considered to overcome this point. First, that there should be a single list of 30 corporate members instead of designation by classes. This, it was pointed out, might result in the exclusion of any one class of membership from the Council. The other suggestion was that designated classes should be in strict proportion to the numerical strength. In this connection it was agreed that whilst there was a need for the Council to have available the opinion and outlook of a proportion of the younger members, it should be composed of the best men available and to a great extent these would tend to be members with some years' experience and responsibility especially those with sufficient freedom to devote time and thought to the work of the Council.

I do not think anyone who has sat on councils and committees will disagree with the Committee reasoning in this connection.

The Committee have recommended and the Council have agreed that the elected members of the Council should consist of 9 Fellows, 9 Associates,

3 Licentiates and 9 Corporate members of any class. (The present proportions are 18 Fellows, 9 Associates and 3 Licentiates.)

The Associates may feel they have not even now received a fair proportion of the seats on the Council, but they now have their opportunity by means of the corporate members.

These alterations necessitate a revision of the annual elections procedure and the following has been agreed:—

That each year 3 Fellows, 3 Associates, 1 Licentiate and 3 Corporate members shall retire and a single list of 10 Corporate members be voted for. From this list, the 3 Fellows, 3 Associates and 1 Licentiate with the highest number of votes shall be elected to fill the vacancies reserved by class and of the remaining candidates the 3 with the highest number of votes shall fill the three places reserved for corporate members of any class.

All it remains for me to say is I feel that the Committee have tackled what was a tricky problem not only with speed but with sound judgment which I hope will help the running of our Institute not for the benefit of one class but for the benefit of architecture.

M. E. TAYLOR, A.R.I.B.A.

Four-point Plan to Lower Building Costs

Mr. Harvey G. Frost, O.B.E., President of the National Federation of Building Trades Employers, speaking at the Half-Yearly General Meeting of the Federation at Clacton-on-Sea, on June 7, said:

"We have been saying for many years that consumer resistance would come. It has, and we must intensify our efforts to reduce costs. The cost of materials and the wages bill together account for some 90 per cent of the total cost of building work. Both of these items are outside the control of builders. Materials prices are fairly steady at the moment, but there is no sign of a decrease; in fact, all the indications seem to point to a possible increase. Building wages have to take into account national wage trends, and the increases given earlier this year—totalling some £25m in a full year—did no more than keep our operatives' wage packets in line with those of workers in other industries.

"The building employer is thus left with a very narrow field in which he can directly influence the general level of building costs and so ease the burden on his client and ensure continued employment for his men. But within this narrow field the National Federation, with the full support of its 10 Regional Federations, has a four-point plan on which it is asking member firms to concentrate. The four points are:—

1. Mechanization and Research.—Mechanical methods must be used on all sites where they can be profitably employed. Member firms are already collaborating with the Building Research Station in a series of trials aimed at overcoming building problems; meantime the Federation is disseminating the results of research throughout the industry.

2. Organization of Work on the Sites.—The Federation has set up a Building Industry Advisory Service which will soon be ready to operate. The Service will advise firms on such matters as work study, site organization, planning and progressing of labour and materials, personnel administration and supervision.

3. Education and Training.—The industry must have competent personnel in all grades. Our National Apprenticeship Scheme and the methods adopted to train our general foremen are among the most progressive in the world. The recent setting up of a Board of Building Education, on which N.F.B.T.E. representatives will sit with their colleagues of the Institute of Builders, will now be responsible for the important job of advising on the training of personnel for the supervisory and managerial grades.

4. Co-operation.—In all these matters we must have the full support of the architects, surveyors and operatives. Our consultations with the representatives of these groups are constantly aimed at working as a team and so improving the efficiency and increasing the productivity of our industry.

"These are the main directions in which the National Federation is determined to give a lead, otherwise the scale of the programme which contractors are called upon to carry out—whether it be houses, factories, schools, offices or maintenance and repair work—is bound to diminish and widespread redundancy and unemployment will be the result."

Similar Tenders

Four tenders received by the Birmingham Corporation for structural steelwork were identical to the last shilling—£2,242 8s, less 2½ per cent. But one quoted a delivery date eight weeks earlier than the others.

Now the city council may ask the Monopolies Commission to investigate the tenders.

The four tenders just received were for steelwork at the new judge's lodgings at Edgbaston Grove.

An executive of one of the firms later said: "On the bottom of the architect's drawing for the building is the weight of steel required for it. The price for the work is calculated from this figure.

"From experience gained by the Steelworkers' Association during the time when prices were checked over by Government Departments there is a fixed price for steel erected."



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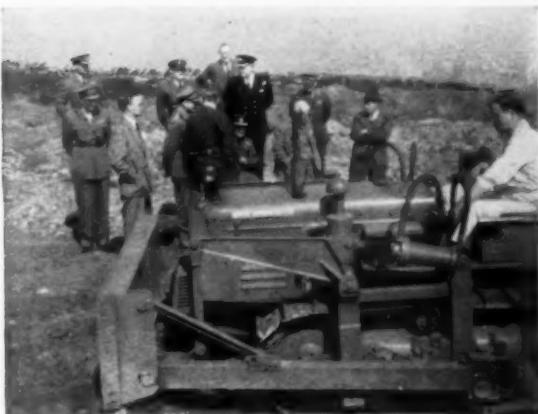


Factories at Grimsby and Billingham and at Burnie, Tasmania. Agents in most principal countries.

Information Digest

OFFICIAL PUBLICATIONS

- **New British Standards**, from the British Standards Institution, British Standards House, 2, Park Street, London, W.I. Telephone: Mayfair 9000.
- B.S.2580 : 1955.** Underground plug cocks for cold water services (Scottish type). Price 2/-.
- B.S.1415 : 1955.** Mixing valves (manually operated) for Abolitionary and domestic purposes. Price 2/6.
- B.S.2569 : 1955.** Sprayed metal coatings, part 1: Protection of iron and steel against atmospheric corrosion and part 2: Protection of iron and steel by aluminium against corrosion at temperatures between 120 and 950 deg. C. Price 2/- each.
- B.S.2552 : 1955.** Polystyrene tiles for walls and ceilings. Price 2/6.
- B.S.559 : 1955.** Electric signs and high voltage luminous discharge-tube installations. Price 5/-.
- B.S.1182 : 1955.** Cast brass thimbles (spigot and socket) and tailpieces. Price 3/-.
- B.S.2592 : 1955.** "Thermoplastic flooring tiles," (sometimes known as "asphalt tiles"). Price 2/6.
- **Building research Station Digests**, published by H.M.S.O. Price 3d. each.
- No. 76.** Machines for handling materials in traditional house building.
- No. 77.** Linoleum.



In a quarry near the works the members of the Imperial Defence College who recently visited the Meltham factory of David Brown Tractors (Engineering) Ltd., saw a demonstration of earth moving given by a David Brown 30 ITD tracklayer fitted with a bulldozer and a 50 ITD fitted with angledozening equipment.

- **Cost savings through Standardization, Simplification, Specialization in the Building Industry.** Published by The Organization for European Economic Co-operation, 2 Rue André Pascal, Paris-16e. Price 12/-.

The Division of Productivity and Technological Developments is conducting a series of studies on savings in material and labour costs resulting from standardization, simplification and specialization. This study is the second in the series.

- **Studies on bridge-deck systems I. Tests on a model Jack-arch slab.** National Building Studies Research Paper No. 21 published by H.M.S.O. for the D.S.I.R., price 4/-.

The design of steel-concrete bridge-deck systems is at present based mainly on arbitrary assumptions and experience has shown that the reserve of strength in such structures is much greater than that calculated. In order to bring about greater understanding of the mechanics of bridge-deck systems and to find out more about their

behaviour under load the Building Research Station has carried out, at the request of the Ministry of Transport, an investigation of various systems of this sort. The publication describes the tests and test results in detail. From the test data it was possible to deduce the effective cross-section for the slab tested and a later report will give general guidance on the design of jack-arch bridges.



Parties of students are visiting, by arrangement with Langley London Ltd., their new showroom in the Borough High Street. There they hear a lecture on the history of roofing and handle tiles themselves on demonstration model roofs. A film on roof tiling is shown and the handling and packing of roofing tiles is demonstrated. After lunch the students returned to the school. The illustration shows a group of overseas students from the Brixton School of Building listening to the lecture.

- **Information on the Canadian Welding Qualification Code**, from the British Standards Institution, 2, Park St., London, W.I. Telephone: Mayfair 9000. Free.

This is one of a series of publications relating to overseas approvals and certification systems that are being pre-produced by the B.S.I. to assist manufacturers in exporting their products.

PROFESSIONAL & TRADE ASSOCIATIONS

- **Fire Protection Notes for Office Buildings.** Issued by the Fire Protection Association, 15, Queen Street, London, E.C.4. Telephone: Central 4642. Free.

The precautions necessary with various forms of heating are discussed in this booklet, suggestions are also made for the maintenance of good order in electrical installations.

- **Annual Report.** From the Coal Utilization Council, 3 Upper Belgrave Street, S.W.1. Telephone: Sloane 9116.

This report, while surveying the successes of the year in the many activities of the Council, also includes recommendations for this year's programme. The most significant development reported was the "Point of Sales" Service in which it is considered that money is better spent in that direction than in National Exhibitions and National

Information Digest (continued)

Publicity. Other points include the training facilities, now with advanced courses for appliance salesmen, informal lectures, one-day courses in technical colleges and a new three-day course for instructors.

- **Code for Lighting in Buildings.** Revised version from the Illuminating Engineering Society, 32, Victoria Street, London, S.W.1. Price 5s.

The forerunner of the I.E.S. Code was first published in 1936 under the title "Recommended Values of Illumination"; revisions followed in 1937, 1941 and 1942. In 1945 a new edition was published and also in 1949. The International Commission on Illumination at its meeting in Stockholm in 1951 recommended that all countries should study the basis of the British Code when preparing codes of their own; in fact the British Code is widely adopted in other countries. In the 1955 Code the presentation and material has been improved and account has been taken of the data on glare which has been established during the last few years.

- **Buyers' Guide to Plastics Materials and Machinery,** from the British Plastics Federation, 11, Garrick Street, London, W.C.2. Telephone: Temple Bar 3901. Price 2s. 6d.

This guide, a 62-page booklet, has been considerably extended and includes particulars of materials in semi-processed forms such as sheet, tubing, etc. There is also a completely new section dealing with machinery and equipment for the plastics industry. The names and addresses of the member companies supplying each type of material and machinery are given and the trade names used shown. All are indexed for ease of reference. At the head of each section of materials there is a note giving the principal properties and the more important applications of the material concerned.



A new television showroom has been opened by the English Electric Co. Ltd. at their Queen's House, Kingsway, showrooms. Of particular interest is the lighting which has been designed to illuminate the room without causing reflections on the television screens. Designer: Albert Smith, F.S.I.A., chairs are by Hille.

- **Annual Report,** from the British Non-ferrous Metals Research Association, Euston Street, London, N.W.1.

This annual report is perhaps more thoroughly produced than most, certainly the material production is excellent and is indicative of the contents. The association's expenditure last year reached a record of £132,000, two-thirds of which was actually spent on research. Other expenditure was on liaison and the information department. The services of these departments are extensively called upon by members.



One of the problems during the reconstruction of the Royal Baths at Bath was the selection of suitable surface coatings which would withstand the humidity and corrosive effects of the hot spring waters. The illustration shows paint sample sheets and short sections of handrail which were suspended at the outflow of the spring. Epikote resin based enamels and Duralite plastic sheeting were chosen by the architects: Rolf & Crozier Cole. The paints were supplied by Norman, Smee & Dodwell Ltd.

- **Leaflets Nos. 6 and 7,** from the British Wood Preserving Association, 6, Southampton Place, London, W.C.1. Telephone: Chancery 4347. Free.

These two leaflets, dealing with "Preservative treatment against wood borers" and "The common furniture beetle," are particularly opportune as the emergency period for furniture beetle is usually from April to early September. When leaflet No. 7 is sent out a list of insecticides is also forwarded.

- **Information Sheets, Nos. 1 to 4.** The Fibre Building Board Development Organisation Ltd., 47, Princes Gate, London, S.W.7. Telephone: Kensington 4577. Free.

The first four information sheets, designed primarily for the Fidor stand at the Ideal Home Exhibition as handouts to the home handyman, are expected to be the forerunners of further sheets of this type.

- **The Care and Treatment of Rubber Flooring.** Issued by the British Rubber Development Board, Market Buildings, Mark Lane, London, E.C.3. Telephone: Mansion House 9383. Free.

The leaflet recommends the use of mild soap and water applied with cloth or mop for normal cleaning, describes the type of polish to use, and lists those cleansers which can be harmful.



The new modern store of Messrs. David Greig of Canterbury lit with Philips internal reflector lamps. Installation planned in collaboration with the Architects, Messrs. Robin Paine & Partners, Canterbury.

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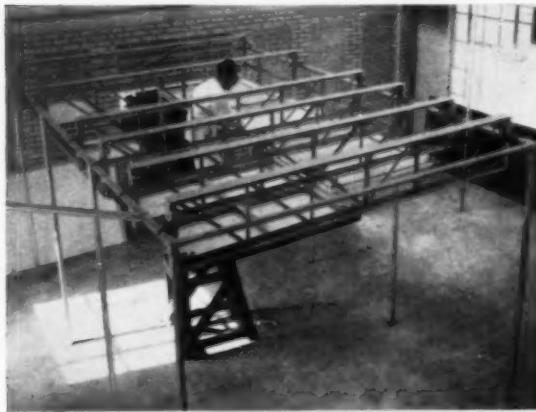
LONDON SHOWROOMS
17, BERNERS STREET.

- **The British Prefabricating Industry Group.** A new association with a provisional address at 15, Upper Grosvenor Street, London, W.I. Telephone: Mayfair 9080.

The principal objects of the group are to establish a representative body of the Industry to enable the Industry's view to be expressed and discussed with the various Government Departments and any organizations with which the Industry may, from time to time, have contact, and to stress the advantages of Prefabricated Buildings and the contribution that the Industry can make to the social, industrial and economic life of the country. The Group has no commercial or sales function, but is prepared to act in an advisory capacity for the industry as a whole.

The following manufacturers are already members of the Group:—

Booth & Co. (England), Ltd.; Boulton & Paul, Ltd.; The Bristol Aeroplane Company, Ltd.; G. H. Burgess & Co., Ltd.; Cruden's, Ltd.; Hawksley Constructions, Ltd.; Maycrete, Ltd.; Medway Buildings & Supplies, Ltd.; Mod-X Structures, Ltd.; H. Newsum Sons & Co., Ltd.; Orlit, Ltd.; Reema Constructions, Ltd.; Robert Building Inventions, Ltd.; Seco, Ltd.; W. J. Summs Sons & Cooke, Ltd.; Spooners (Hull), Ltd.; Stephenson Developments (Huddersfield), Ltd.; Woolaway Constructions, Ltd.



A building for carrying out practical testing on "Asbestolux" asbestos insulation board has been opened by the Cape Asbestos Company Limited, at Cowley Bridge Works, Uxbridge, where the board is made. The building is so designed as to enable the erection of full size structures inside. Methods of ceiling suspension and the fixing of cladding panels are investigated according to the various types of structure under consideration. Leading off the main ground floor area is a conference room where customers can discuss their plans and designs with the company's technicians.

TRADE PUBLICATIONS

- **The Preservation and Protection of Timber, including notes on the habits and treatment of its enemies.** From the Xylamon Advice Bureau, Silexine Paints, Ltd., Richford Street, London, W.6. Telephone: Shepherds Bush 4461. Free.

It states, in the front of this nicely produced pocket-sized illustrated booklet, that it has taken thirty years' research, several million experiments and a number of brilliant advances in the field of synthetic chemicals to produce the information within. It goes on to estimate that timber decay costs the country £20,000,000 annually and describes the various types of fungus and insect attack, starting with the major enemy, Dry Rot, which, coupled with cellar fungus, *Coniophora cerebella*, accounts for 95 p.c. of all timber decay.

A further section gives some simple suggestions on how to avoid dampness. Throughout this booklet various grades of Xylamon are recommended for treatment and prevention of the various timber pests and diseases. Xylamon is the registered trade name of a group of synthetic wood preservatives which contain new toxic agents, and its characteristics

are described as being a hundred per cent toxic, tar-free, neutral, chemically stable, anti-freezing, water-insoluble and having a faint odour that disappears after short aeration. It is also claimed to be harmless to humans and domestic animals if properly used, non-inflammable and effective against all forms of wood-attacking fungi and timber pests.

The final pages describe the methods of applying Xylamon and the laboratories at Rheinberg; a test report of the Forest Products Research Laboratory is published, and advice and guidance are offered free from the Xylamon Advice Bureau.



- **Concreting and Decorating,** a film by Joseph Freeman Sons & Co. Ltd., of Cementone Works, Wandsworth, S.W.10. Telephone: Vandyke 2432.

Following on from the previous Cementone film, Helpful Hints, this new film has been produced to supersede it by the Gateway Film Unit. The film is divided into four parts, Concrete Floors, Cement Rendering, Decorating and Maintenance. For continuity an animated sequence of drawings of an imaginary contract in progressive stages of construction is interposed between each of the sections.

- **The Murisan Manual,** by British Paints Ltd., Britannic Works Portland Road, Newcastle-on-Tyne, 2. Telephone: Newcastle 25151.

This manual provides detailed information relating to the uses and methods of application of the range of Murisan Latex Emulsion products.

ALSO RECEIVED

- **The Reinforced Concrete Review, Vol. 3, No. 7,** The Reinforced Concrete Association, 94-96 Petty, France, London S.W.1.
- **Building Centre Bulletin,** the Building Centre, Store St., Tottenham Court Road, W.C.1. Telephone: Museum 5400.
- **The Review, Vol. 1, No. 7,** the Coal Utilisation Council, 3 Upper Belgrave St., S.W.1. Telephone: Sloane 9116.
- **21st Annual Report,** the Timber Development Association, 21, College Hill, E.C.4. Telephone: City 4771.
- **St. Stephens Walbrook,** a history from Saint Stephens Church, Walbrook, E.C.4.
- **The Stramit Advertiser No. 12,** Stramit Boards Ltd., Cowley Peacheay, Uxbridge, Middlesex.
- **Review of the Year, 1954,** Associated Electrical Industries Ltd., Crown House, Aldwych, London, W.C.2.
- **B.C.U.R.A. Quarterly Gazette No. 25,** from the British Coal Utilisation Research Association, Randalis Road, Leatherhead, Surrey.
- **Stone No. 8,** from the British Stone Federation, 70, Victoria St., S.W.1. Telephone: Victoria 6018.
- **Fifty-sixth Annual Report of the Towns and Country Planning Association,** The Planning Centre, 28, King Street, London, W.C.2. Telephone: Temple Bar 5006.
- **Journal of the Institution of Heating and Ventilating Engineers,** 49, Cadogan Square, London, S.W.1. Telephone: Sloane 3158.
- **Oiram Bulletin Vol. 32, No. 2,** the General Electric Co. Ltd., Magnet House, Kingsway, London, W.C.2.
- **Jenolite News Vol. 7, No. 4,** from Jenolite Ltd., 13-17, Rathbone St., W.1. Telephone: Museum 5111.
- **Calculator Domestic Refrigerators,** from the International Refrigerator Co. Ltd., Peterborough, Telephone: Peterborough 5351.
- **B.N.E. Bulletin, No. 23,** British National Electrics Ltd., Newarthill, Motherwell, Scotland.
- **Glue Lines No. 11,** issued by Leicester, Lovell & Co. Ltd., North Beddesley, Southampton. Telephone: Rownham 363.
- **Switchgear Monthly Bulletin, Nos. 1-13,** from the General Electric Co. Ltd., Magnet House, Kingsway, London, W.C.2. Telephone: Temple Bar 8000.
- **Wates News, Vol. 13, No. 4,** Wates Ltd., London Road, S.W.16.
- **Non-expandable formers for ceiling fittings,** from Durabro Co. Ltd., 1, Adelaid St., Strand, London, W.C.2. Telephone: Covent Garden 1156.
- **Leaflet 230, a 13 amp. fused plug in "Rubberclad" to B.S.1363,** by M. K. Electronics Ltd., Wakefield St., Edmonton, N.18. Telephone: Edmonton 5151.
- **Building Plant Exhibition 1955,** Ministry of Works.
- **Wimpey News No. 161,** from George Wimpey & Co. Ltd., Hammersmith Grove, London, W.6. Telephone: Riverside 2000. Price 2d.

A New Development in Indirect Domestic Water Heating Systems

AN indirect system of water heating is becoming standard practice in modern installations. It has, however, hitherto been the practice to provide two separate cold storage systems and two separate expansion systems, one of each for the primary and one of each for the secondary. This is comparatively expensive, and complicated, and it has long been desired to have one cold storage tank from which both systems can be replenished automatically, and one expansion means, common to both systems.

To achieve this result it is necessary to provide, within the one main cylinder, apparatus for automatically feeding cold water into the primary system, both in the initial filling operation and in subsequent replenishing when necessary; and also an escape channel for the expansion of that primary water as it increases in volume due to temperature rise.

It is known that this volume increase is about 4 per cent at 212 deg F., and were this expanded volume allowed to flow into the storage water it would contaminate that water with rust, scale, etc. Moreover, on cooling, the contraction in volume could draw in fresh water, were free access available, and that dosage of fresh water repeated every time the primary contents were cooled after heating would eventually replace all the original primary water. This would increase the scale deposit in the primary system and boiler and, in the course of time, the essential purpose of the "indirect" would be defeated.

The "Primatic" storage cylinder, it is claimed, has overcome all these difficulties. In the drawing: **A** is the main hot water storage vessel. **B** is the inner or heat exchange annular of the primary water system. **C** is the automatic device for filling the primary, replenishing it when necessary, and is also the space into which the primary water may expand when heated. This chamber is formed by two half-spheres, one attached to the outer wall of **B**. **D** is a pipe of suitable diameter for the capacity of the apparatus. **E** is a U-trap, one end attached to **B**, the other end open and pointing downwards. **F** is the primary return pipe from the heat exchanger **B** to the boiler. **G** is the primary connection from the boiler to the heat-exchanger **B**. **H** indicates four $\frac{1}{4}$ in diameter holes in the wall of pipe **D**. **J** is the cold feed entry for water for the whole apparatus. **K** is an internal air-vent in the U-trap. **L** is a $\frac{1}{8}$ in diameter hole in the outer wall of **B**.

The apparatus functions as follows:—

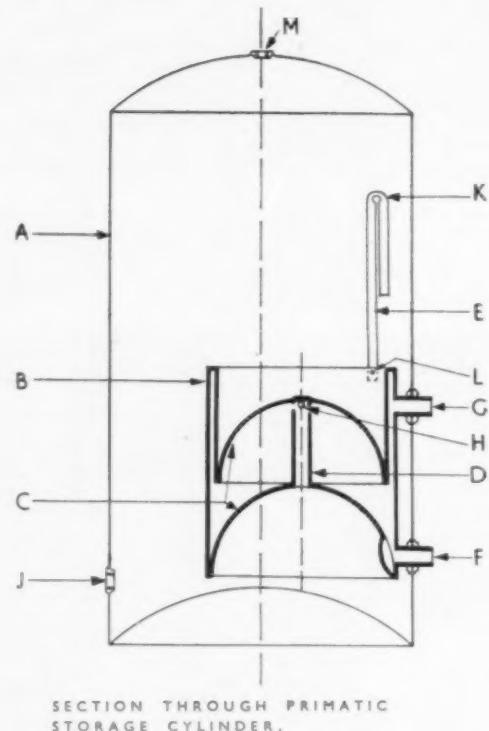
When the cold feed enters at **J**, as it rises to fill the apparatus it does so normally to the level of holes **H**. At this moment, although water surrounds **B**, in **A**, it can only enter Chamber **C**, up to the pipe **D** through holes **H**. It then pours through holes **H** into **C** and through connector **F**, thence filling all the primary system (boiler, pipes, radiators, etc., etc.) below that level.

As the water continues to enter **A**, although the air in **C** is trapped, water continues to flow through holes **H** until the whole of the primary system is filled to the top of **B**; the U-trap device **E** providing an air escape continually.

Water progressively fills **A**, rising up the U-trap a little way until an air lock occupies the major portion of both legs of the U-trap.

The whole of both systems is now filled and stabilized.

On heating the primary water it expands, particularly



SECTION THROUGH PRIMATIC STORAGE CYLINDER.

when, through heat exchange, the temperature of the secondary water rises to nearly that of the primary water. This volume expansion takes place for an inch or so of level up the U-trap device **E**, but also for the same height within the chamber **C**. The air thereby displaced from **C** pushes down tube **D** to gather under the base of chamber **C**. The depth of chamber **C**, and its diameter, are such that it is capable of receiving all the expansion water from the primary without rising to the level of hole **H**. The primary water therefore cannot escape through **H** to the main storage. Nor can it escape through the air lock in U-trap **E** and thence to the main storage.

On cooling, the primary water will reduce again in volume, and will be withdrawn again from Chamber **C**. Similarly, the water levels in the U-trap **E** will stabilize at a slightly different level, from then on to be unchanged. Through leaking radiators, or other causes, there may in time be a wastage of primary water. This will be automatically replaced, through **D**, **H**, and **C**, as fully described in the initial filling.

It will be a possibility that the primary system may be so overheated as to cause turbulence throughout the whole system and up the vent tube **E**. The chambered section **K** is very effective in baffling this turbulence on the rare occasions it may happen. In this way the passage of stained primary water through the U-trap is prevented.

The Primatic Universal domestic copper hot-water cylinder is manufactured by Range Boilers, Ltd., Stalybridge, Cheshire.

ELECTRIC LIGHTING

KITCHENS—FLUORESCENT LAMPS—MIRRORS

Most rooms in a house or flat can be lighted in a variety of ways according to the tastes of the owner, but specific lighting problems having a functional basis also arise, and these should be considered from a technical point of view. Some of these cases which may affect detailed planning and design, are considered below.

Kitchen Lighting

The most important requirements with regard to artificial lighting in the kitchen are :

- (a) No-one working there should ever have to work in a shadow.
- (b) The light provided should, as far as possible, be well distributed over the working areas, including cooker and sink.
- (c) The lighting intensity should be at least equal to that generally provided for reading and sewing.
- (d) There should be freedom from glare, not only from the lights themselves, but also from reflecting surfaces such as walls, table and counter tops.

Positions of Lighting Fittings in the Kitchen

A single source of light is rarely adequate for lighting even a small kitchen, although it may suffice if the room is less than 50 sq. ft. in area and the light is carefully placed immediately above the working area. As a general rule, two ceiling fittings placed diagonally as TFC in Fig. 2 should be provided, supplemented by local lighting to sink, cooker or preparation counter as rendered necessary by the size or shape of the kitchen. The fittings used should be of the totally enclosed diffusing type which are not likely to cause glare. If wall tiling is to be used above counter height, matt-glazed tiles are preferable to the standard highly glazed article. Working surfaces which are white or highly reflective may also cause glare by reflection.

If fluorescent lamps are used, reflected glare is less, and a central position in a small kitchen is usually satisfactory owing to the larger size and excellent light distribution of these lamps. In other cases they should be placed as shown in Figs. 1 and 2. A fluorescent lamp with filament (or tungsten) ballast control, as described in L.2, has been used in the kitchen in Fig. 2; the ballast lamp has been separated from the fluorescent lamp to give light to the cooker and adjacent counter, each lamp thus performing a separate duty, but controlled by the same switch. This type of control is at present only available for 4 ft. 40 watt fluorescent lamps. The fluorescent lamp, preferably with a diffusing fitting, may be fixed to the ceiling, and the filament ballast lamp used in an enclosed general diffusing fitting in the normal way.

Another possibility is to mount the fluorescent lamps behind valances (see below and Fig. 3); these may be incorporated in the design of the upper cupboards, extended across a recess or window, or continued for the full length of a wall, according to circumstances. Smaller tubular or fluorescent lamps can conveniently be used to light dark areas formed by corners or overhanging cupboards if the general lighting is insufficient for the purpose, as is sometimes the case in old or converted kitchens.

Fluorescent Lamps

Although fluorescent lamps have been used in kitchens for some time, they are rarely found in other rooms, mainly owing to the limited colours available and the bulk and cost of the fittings which contain them. The situation has been changed by the recent introduction of the De-Luxe Warm White lamp, which gives a light closely approximating in appearance and colour rendering to that of filament lamps, and which is more generally acceptable.

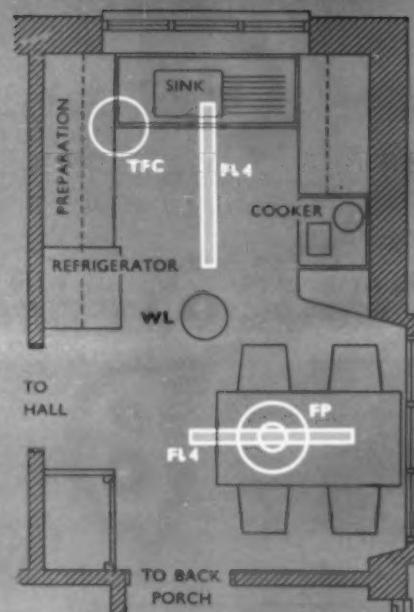


Fig. 1 Dining kitchen lighting

SCALE: 4 FEET EQUALS 1 INCH

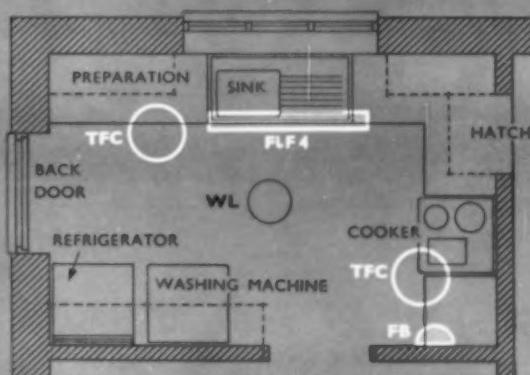


Fig. 2 Working kitchen lighting

SCALE: 4 FEET EQUALS 1 INCH

- WL Wrong light position
- TFC Filament ceiling fitting totally enclosed
- FP Filament lamp pendant fitting
- FL4 4ft. fluorescent fitting
- FLF4 4ft. fluorescent fitting filament ballast
- FB Filament ballast lamp

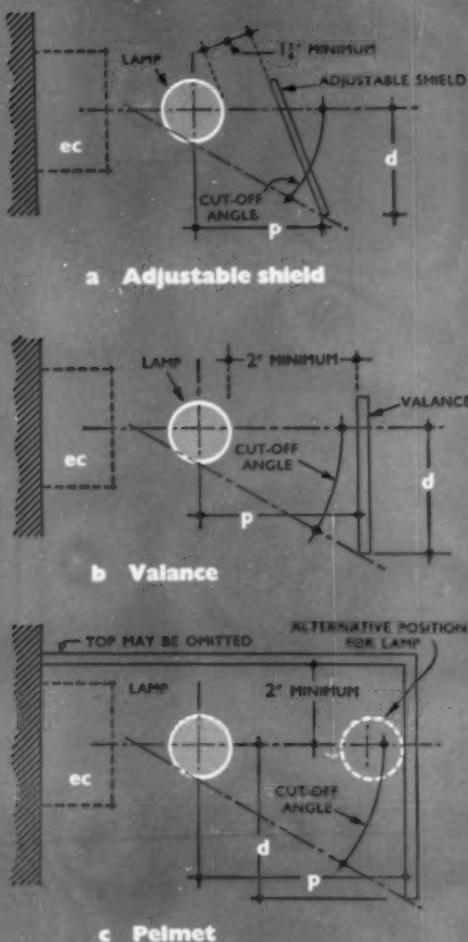


Fig. 3 Shielding of fluorescent lamps

The cut-off angle is determined by the need to prevent the lamp from being seen from any normal position; the relationship between p , d and height of lamp above floor level decides the cut-off angle. As p decreases and d increases the useful light is reduced: ec denotes equipment channel. The alternative position of lamp is for curtain lighting.

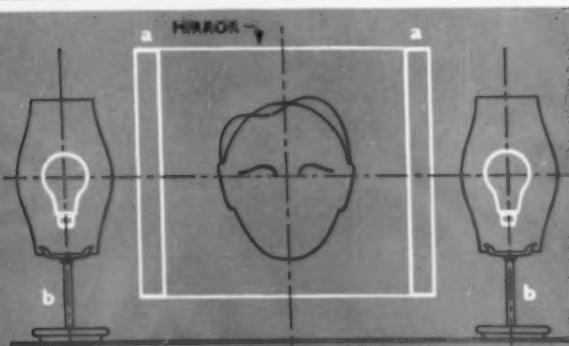


Fig. 4 Mirror lighting

- a Tubular lamps in plane of mirror, preferably behind diffusing glass
- b Table lamps in diffusing shades

In the living room, bedroom and hall, where their special qualities can be a valuable asset, fluorescent lamps can be employed in a simple and dignified way by screening with shields and valances to distribute the light as required. These shields are unobtrusive and economical, and easily made of plywood or sheet metal. Fig. 3 illustrates the functional requirements of typical installations of this type.

Whether normal or filament ballast control is used, the control gear (or ballast lamp) can be placed wherever convenient nearby, e.g. in the upper part of a cupboard, or in a separate lighting fitting, according to the type of circuit used. This enables the size of the screen to be reduced to the minimum necessary to screen the lamps from view, and makes it possible to use them in conjunction with bookcases, writing or work tables, in recesses or at the head and foot of stairs, as well as in the more familiar sites above windows.

Mirror Lighting

Though often attempted, mirror lighting, as generally carried out, is not always satisfactory. It is essential that the mirror lights should shine on the face of the person using the mirror, *not* on the mirror itself. They should give a clear diffused light of low brightness, and should not be seen reflected in the mirror. The best positions in connection with a dressing table are on either side, as nearly as possible in the plane of the mirror face and at the eye level of the person customarily using it. Tubular lamps, wall or table lamps in these positions (see Fig. 4), will be satisfactory provided that the other requirements given are satisfied. Overhead lamps are virtually useless for mirror lighting. Dressing table and bed-head lights should always be additional to the general bedroom lighting, and are best served from socket outlets conveniently placed: see DI.1.

Cupboards and Lofts

The lighting of a cupboard interior becomes necessary when it is too deep or too far from the general illumination for its contents to be easily distinguished or handled. A small filament lamp inside above the door, operated by an automatic door switch recessed into the frame on the hinge side, will solve this problem efficiently and economically in many instances.

Lighting is necessary in the roof space if it contains the cold water storage cistern or is used for storage: control should be taken from the floor below or by an automatic switch operated by the trapdoor. Place the lights so that the water cistern and stopcocks are clearly illuminated and use either fully-earthed or all-insulated equipment.

Early Consideration Necessary

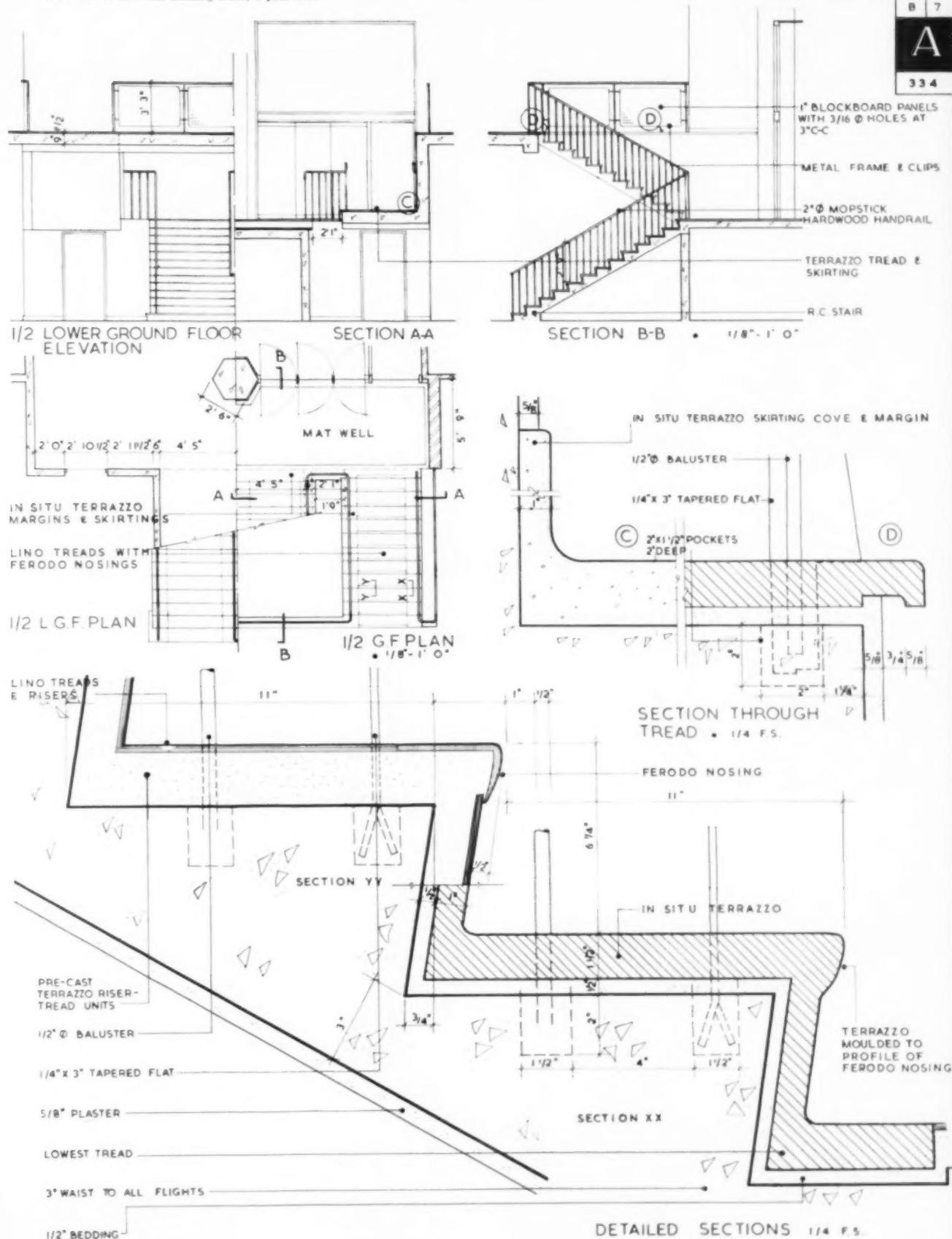
It is strongly recommended that more detailed consideration is given to the lighting requirements when the plans and specification are being prepared. Electricity is the life-blood of modern building and adequate accommodation must be provided in the structure to receive its arteries. In particular, the number and positions of socket outlets and outlets for "built-in" lighting fittings, screens, valances, etc., require to be known before detailing begins, if the best results are to be achieved.

As discussed in DI.1 and DI.2, ring circuits with universal 13 amp. socket outlets enable the requirements of a modern household to be economically met, and facilitate later additions as and when they become necessary.

For further information apply to:

L. 4

British Electrical Development Association

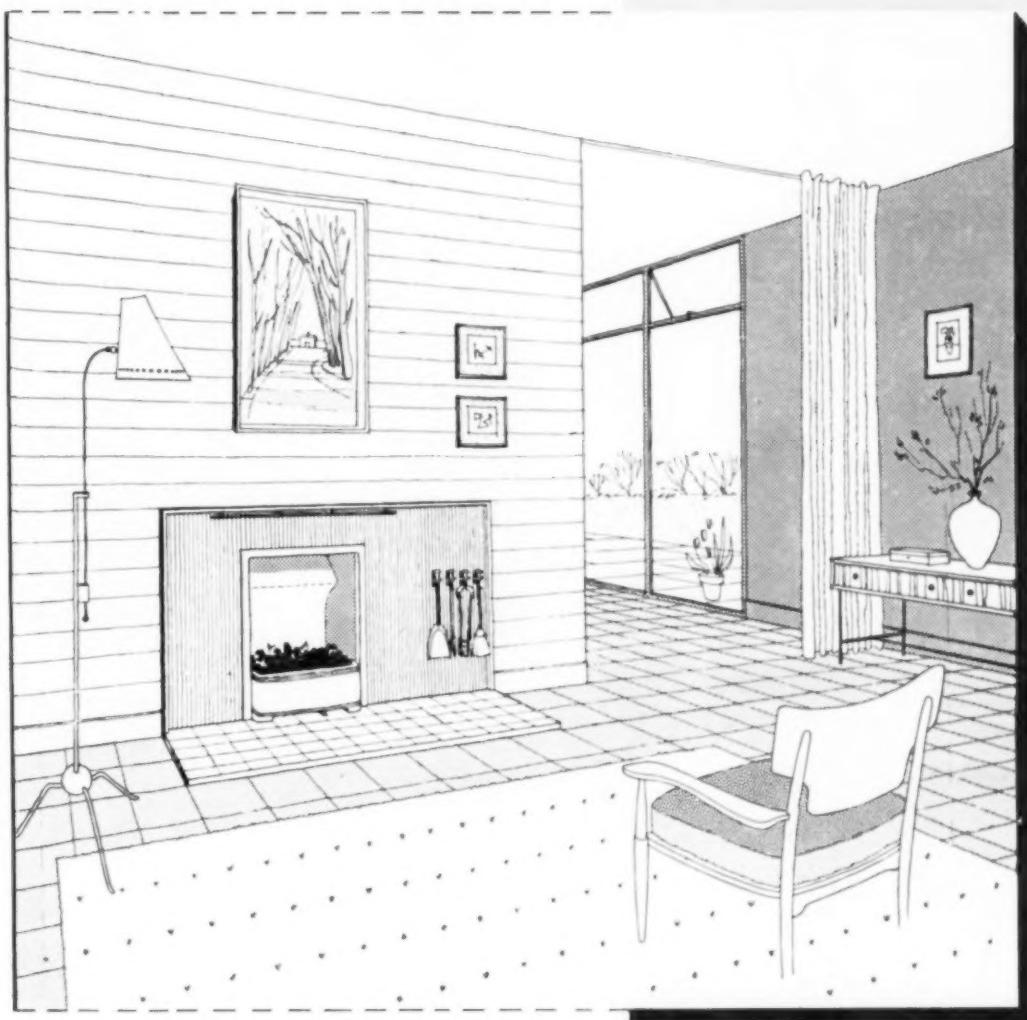




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ARCHITECTS: ROLF HELLBERG & MAURICE HARRIS

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The Lexham is on show in the 'International Hall' at Helsingborg, where there are complete apartments designed by ten different nations. Every detail, throughout this exciting exhibition, has been closely scrutinised by a jury of design-experts in Sweden . . . and nothing was included in the British exhibit until it had been approved by the Council of Industrial Design here.

Michael Patrick, A.R.I.B.A., who designed the British apartment, chose the continuous-burning Lexham and the beautiful cast iron reeded surround for their obvious qualities of simplicity and elegance. And—not so obvious, but equally important—for the Lexham's serious function of providing the maximum heat for a minimum of *smokeless fuel*.

For further details of the
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write to the Housing Division of :—

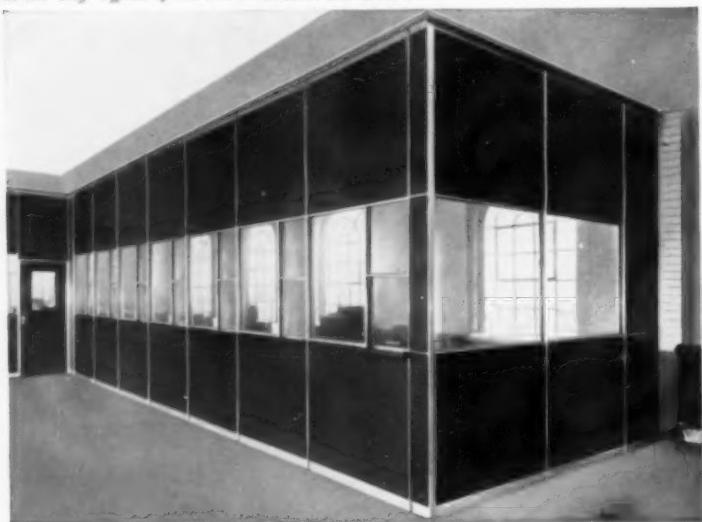


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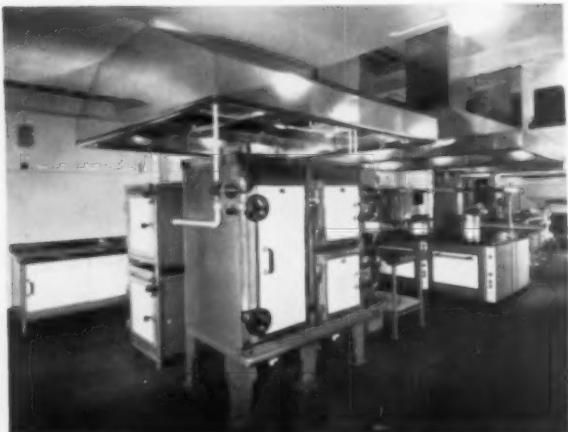


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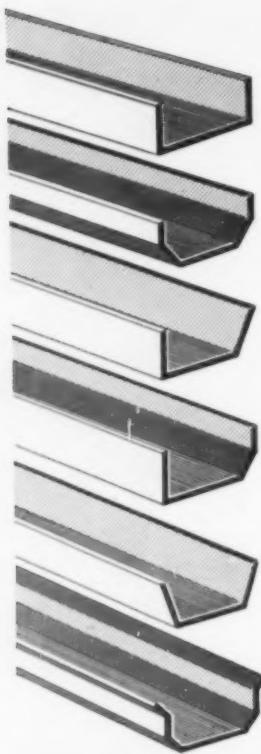
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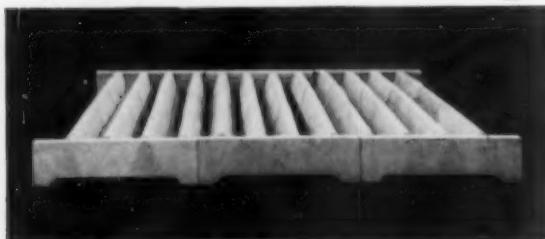
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Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the

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address it is the same as the locality given in the heading, (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked ★ are given in the advertisement section.

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MANCHESTER C.C. (a) Home for aged persons, Sale Road, Northern Moor. (b) City Architect, P.O. Box 488, Town Hall. (c) June 29.

MOSSLEY B.C. (a) 32 houses, Micklehurst Estate. (b) Frank Bradley, Penny Bank Chambers, 4, Wood Street, Bolton. (c) 2gns. (e) June 25.

N. IRELAND—ANTRIM E.C. (a) Alterations and additions to Greenisland Primary School. (b) Messrs. McCarthy and Lilburn, Scottish Provident Buildings, Donegall Square West, Belfast. (c) 3gns. (e) June 29.

N. IRELAND—NORTHERN IRELAND HOUSING TRUST. (a) 40 dwellings together with engineering and ancillary works at Millisle, Co. Down. (b) Offices of the Trust, 12, Hope Street, Belfast. (c) £3. (e) June 28.

NORTHWICH U.C. (a) Contract No. 57. 76 dwellings, Leftwich Estate. (b) Council's Engineer, The Council House. (c) 2gns. (e) June 27.

NOTTINGHAM C.C. (a) Shops and branch library, Spondon Street, Sherwood. (b) City Engineer, The Guildhall. (c) £2. (e) July 4.

PLYMOUTH C.C. (a) Erection of (1) 2 shops, 1 flat, 1 maisonette and 2 garages at the junction of Norwich Avenue and Oakham Road, Whiteleigh, Plymouth; (2) alterations and conversion of Highbury, Tavistock Road, Peverell, Plymouth, into a mental health occupation centre. (b) City Architect, Seymour Road. (c) 3gns each contract. (d) June 18.

PRESTON B.C. (a) Alterations and extensions at Maitland Street Domestic Science Centre. (b) Borough Engineer, Municipal Buildings, P.O. Box No. 10. (c) £2. (e) July 4.

RINGWOOD AND FORDINGBRIDGE R.C. (a) 4 bungalows, together with ancillary drainage and site works, at High Street and Back Lane, Damerham. (b) Frank Andrews, 45, High Street, Ringwood. (c) 2gns. (e) June 30.

SCOTLAND-ARGYLL C.C. (a) (1) Erection of police station and garage at Salen, Mull; (2) alteration and addition of kitchenette and office at Taynuilt Police Station. (b) County Architect, County Offices, Dunoon. (d) June 21.

SCOTLAND—GLASGOW CORPORATION. (a) 2 double and 4 single shops and 8 maisonettes, Kyleakin Road, Arden. (b) Architectural and Planning Department, 20, Trongate, Glasgow, C.1. (e) June 28.

SOUTHEND B.C. (a) Alterations and extensions to the fire station, Elm Road, Leigh-on-Sea. (b) Borough Architect, 30, Alexandra Street, Southend-on-Sea. (c) £2. (e) July 8.

SOUTH SHIELDS CORPORATION. (a) 122 garages within the boundaries of the county borough. (b) Borough Engineer, Town Hall. (c) 2gns. (e) June 27.

SUFFOLK AND IPSWICH FIRE AUTHORITY. (a) Erection of proposed new fire station at Elmwell. (b) E. J. Symcox, County Hall, Ipswich. (c) 2gns. (d) June 27. (e) July 12.

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SWANSEA B.C. (a) Erection of a building to house a central garage and repair shops and ancillary works at Pipe House Wharf, Upper Strand. (b) Borough Engineer, The Guildhall. (c) £5 (e) July 5.

TAUNTON B.C. (a) Erection of entrance gates, walls, lodge and superintendent's office at the New Cemetery, Wellington Road. (b) Borough Engineer, St. Paul's House. (e) July 6.

WEST BRIDGFORD U.C. (a) Erection of (1) 21 garages off Wood View, Edwalton Estate; (2) 23 garages off Lutterell Way, Valley Road Estate; (3) 6 garages off Stamford Road, Valley Road Estate. (b) Council's Engineer, The Hall. (c) £2. (e) July 1.

WEST SUSSEX C.C. (a) New central library in brick construction at North Street, Horsham, and construction of service road. (b) County Architect, County Hall, Chichester. (d) June 27.

WORCESTER C.C. (a) Contract No. 1. 24 houses in terraces of 4 and pairs; Contract No. 2. 30 houses in terraces of 4 and pairs; Warndon Estate. (b) City Engineer, 22, Bridge Street. (c) 3gns each contract. (e) Contract 1, June 24, and Contract 2, June 30.

WORTHING R.C. (a) Block of 6 garages at Nelson Close, Sompting, and block of 3 garages at Edward Road, Rustington. (b) Council's Engineer, 15, Mill Road. (e) June 27.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. * denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

GOSPORT B.C. (1) 100 houses for the Admiralty, and 104 houses for the B.C. (3) Hawkins Bros. (Gosport), Ltd., Westfield Road, Gosport, Hants. (4) £436,000 total.

HAMPSTEAD B.C. (1) Blocks containing 134 flats. (2) Finchley Road, Swiss Cottage. (3) Unit Construction Co., Ltd., Faggs Road, Feltham, Middlesex. (4) £342,750.

BELFAST CORPORATION. (1) 110 houses. (2) Anderstown Park Estate. (3) Fortus Construction Co., Ltd., Riddels Buildings, Donegall Place, Belfast. (4) £137,968.

LONDON, E.C. (1) Factory and offices. (2) Clerkenwell Road. (3) Griggs and Sons, Ltd., 56, Victoria Street, London, S.W.1. (4) £54,000.

BLACKHEATH, S.E. (1) 61 flats for Bargold Estates, Ltd. (2) The Priory, Lee Road, Blackheath. (3) Wates, Ltd., 1258, London Road, Norbury, S.W.16.

ROCHESTER CORPORATION. (1) Secondary school. (2) Warren Wood. (3) Wrights, Ltd., Sittingbourne, Kent. (4) £105,000.

ROTHERHAM. (1) Large factory. (2) Eastwood Trading Estate, for William Cooke and Co., Ltd., engineers, etc., Sheffield. (3) W. J. Simms, Son and Cooke, Ltd., Haydn Road, Sherwood, Nottingham.

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DENBIGHSHIRE C.C. (1) Fire station. (2) Wrexham. (3) William Gittins (Contractors), Ltd., Johnstown, Wrexham. (4) £37,819.

HARLOW, ESSEX. (1) St. Albans R.C. secondary school. (3) Whyatt (Builders), Ltd., 225, Streatham High Road, London, S.W.16. (4) £45,000.

WESTMINSTER CITY COUNCIL. (1) Extension of contract for blocks of flats. (2) Churchill Gardens. (3) M. J. Gleeson (Contractors), Ltd., London Road, North Cheam, Surrey. (4) £168,085.

EAST SUFFOLK C.C. (1) First installment of College of Further Education. (2) Lowestoft. (3) W. Ames, Ltd., Halesworth, Suffolk. (4) £73,000.

ST. MARYLEBONE B.C. (1) Block of 42 flats. (2) Townshend Estate. (3) Perry's (Ealing), Ltd., 75, Uxbridge Road, Ealing, W.5. (4) £86,000.

OXFORD. (1) Paper mill, etc., for Oxford University Press. (2) Wolvercote. (3) T. H. Kingerlee and Sons, Ltd., Queen Street, Oxford. (4) £200,000.

STANLEY U.D.C. (1) 103 houses. (2) Stanley, Co. Durham. (3) Thomas Armstrong, Ltd., Cockermouth, Cumberland.

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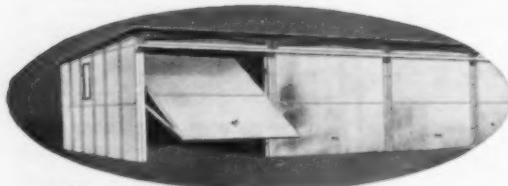
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APPOINTMENTS

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc. If the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is excepted from the provisions of The Notification of Vacancies Order, 1952.

BOROUGH OF BASINGSTOKE.

BOROUGH ARCHITECT'S DEPARTMENT.

APPLICATIONS are invited for the appointment of an Architectural Assistant A.P.T. Grade II (£560-£640).

Applicants should have reached the standard of the Intermediate Examination of the R.I.B.A.

The appointment will be subject to the provisions of the Local Government Superannuation Acts 1937 to 1953, and to the National Conditions of Service, and the successful candidate will be required to pass a medical examination.

Applications stating age, qualifications and giving details of education and experience together with copies of two recent testimonials, and to be submitted to the Borough Architect (Eric Almond, Dipl. Arch., R.I.B.A.), Municipal Buildings, Basingstoke, not later than Thursday, June 23rd, 1955.

Candidates should state whether housing accommodation is required.

MEIRION O. JONES,
Town Clerk,

Municipal Buildings,
Basingstoke. [1152]

METROPOLITAN WATER BOARD.

APPOINTMENT OF ASSISTANT ARCHITECTS

THERE are two vacancies for ASSISTANT ARCHITECTS for appointment to the permanent pensionable staff of the Surveyor's department. One appointment will be at a commencing salary of £880 p.a. rising to £920 p.a. and one at £820 p.a. rising to £880 p.a. It is a condition of the appointment to and the holding of these positions that the selected candidates must be and continue to be subscribing corporate members of the Royal Institute of British Architects. Applicants should have had experience in the design, preparation of plans and working drawings, specifications and quantities for the erection of houses and offices.

Forms of application may be obtained from the undersigned on receipt of a stamped addressed foolscap envelope, quoting reference (G.P.S.), and completed forms must arrive not later than 6th July, 1955.

W. S. CHEVALIER, Clerk of the Board,
Offices of the Board, New River Head, Roseberry Avenue, E.C.1. [1167]

LEYTON COMMITTEE FOR EDUCATION.

APPOINTMENT OF SENIOR ASSISTANT ARCHITECT.

APPLICATIONS are invited for the above permanent appointment in the School Architect's Section of the Borough Engineer and Surveyor's Department at Grade A.P.T. IV (£705-£855, including London Weighting, which is reduced according to scale where the age of the successful applicant is less than 26 years).

Applicants should be Registered Architects with experience in the planning, construction and supervision of school building works.

Details and Form of Application from the Borough Education Officer, Kirkdale Road, Leytonstone, E.11, to whom they should be returned not later than FRIDAY, 8th JULY, 1955.

D. J. OSBORNE,
Town Clerk.

Town Hall,
LEYTON, E.10. [1179]

APPOINTMENTS—contd.

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Appointments are on a permanent basis, 5 days a week at Head Office, Hammersmith.

For applicants interested in work in the Midlands, appointments are available in Birmingham Regional Office, carrying similar conditions with the exception that the working week is 5½ days.

Salaries will be according to qualifications and experience, and, subject to satisfactory service, there is a Pension scheme for those wishing to make a career with the firm.

Applicants should write giving full particulars to E. V. Collins, A.R.I.B.A., Chief Architect, George Wimpey & Co., Ltd., 27, Hammersmith Grove, London, W.6. [9018]

OFFICE OF THE RECEIVER FOR THE METROPOLITAN POLICE DISTRICT.

APPLICATIONS are invited for unestablished appointments as Architectural Assistants (New Works and Maintenance Branches) and also as Sanitary Engineering Assistants in the Chief Architect and Surveyor's Department.

Rates of Pay £442 10s (age 21) by annual increases to £695 (men) and £442 10s by annual increases to £615 (women). Overtime of approximately £24 per annum is also payable while a 45-hour week is worked.

Conditioned hours 44 per week. Annual Leave 24 days.

Application forms from the Chief Clerk, Architect and Surveyor's Department, New Scotland Yard, S.W.1, stating for which drawing office application is made. [0958]

URBAN DISTRICT OF EAST BARNET.

APPLICATIONS are invited for the following permanent appointments:

(a) SENIOR ASSISTANT ENGINEER, Grade A.P.T. IV (£675-£825 per annum).

(b) ASSISTANT ENGINEER, Grade A.P.T. III (£600-£725 per annum).

(c) ASSISTANT ARCHITECT, Grade A.P.T. III (£600-£725 per annum).

(d) PARKS SUPERINTENDENT, Grade A.P.T. II (£540-£640 per annum).

(e) ENGINEERING ASSISTANT, Grade A.P.T. I (£500-£580 per annum).

(f) TWO DRAUGHTSMEN, Grade A.P.T. I (£500-£580 per annum).

All salaries will be increased by London Weighting of £20-£30 per annum according to age.

Housing accommodation will be provided for appointments (a), (c) and (d), if necessary.

Conditions of Appointments and Forms of Application, returnable by 6th July, 1955, may be obtained from the Engineer & Surveyor, Town Hall, Station Road, New Barnet, Hertfordshire. [1185]

SENIOR DRAUGHTSMEN required by LONDON ELECTRICITY BOARD

APPLICATIONS should have had a good general and technical education. Vacancies—Beckenham, Kent and Central London. Superannuable appointments.

Commencing salary according to qualifications and experience within N.J.B. Grade 5 Scale—£672-£777 p.a. incl.

Further details and application forms from Personnel Officer, 46-7, New Broad St., London, E.C.2. Please enclose addressed envelope and quote ref. V/1966/1979/AA. [1186]

APPOINTMENTS—contd.

WALTHAMSTOW COMMITTEE FOR EDUCATION.

APPLICATIONS are invited for permanent appointments in the office of the Architect to the Committee, Mr. Frank H. Heaven, A.R.I.B.A., A.R.I.C.S., at salaries as follows:

(a) Assistant Architect: Grade A.P.T. IV (£675 x £30 to £825 per annum).

(b) Assistant Architect: Grade A.P.T. III (£600 x £25 to £725 per annum).

Applicants for posts (a) and (b) must be Associate Members of the R.I.B.A. or hold an equivalent qualification.

(c) Architectural Assistant: Grade A.P.T. II (£560 x £20 to £640 per annum).

(d) Two Architectural Assistants: Grade A.P.T. I (£500 x £20 to £580 per annum).

In addition to the salaries quoted above, London Weighting is payable as follows:

£30 per annum if 26 years of age or over.

£20 per annum if between 21 and 26 years of age.

Application forms to be obtained from and returned to the Borough Education Officer, Town Hall, Forest Road, Walthamstow, E.17, within two weeks of the appearance of this notice. [1159]

HEMEL HEMPSTEAD DEVELOPMENT CORPORATION.

SENIOR ARCHITECT. Salary scale £715-£975 p.a. Must be A.R.I.B.A. and should have experience in commercial and/or domestic architecture.

SENIOR ASSISTANT ARCHITECT. Salary scale £715-£855 p.a. Must be A.R.I.B.A. and experienced in commercial and/or domestic architecture.

ASSISTANT. Salary scale £520-£685 p.a. Inter. R.I.B.A. essential.

JUNIOR ASSISTANT. Salary scale £260-£455 p.a. Applicants should have some drawing office experience and be studying for the Inter. R.I.B.A. examinations.

Other applications from persons with experience but not yet qualified for the Senior or Assistant grades will be considered for appointment to other grades with slightly lower salary scales.

Conditions of service similar to those of Local Government.

Housing accommodation may be available.

Applications, giving age, education, qualifications and experience, names of 2 referees, should reach the General Manager, Westbrook Hay, Hemel Hempstead, by 24th June. [1169]

EXMOUTH URBAN DISTRICT COUNCIL.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

APPLICATIONS are invited for the appointment of an Architectural Assistant who will be primarily engaged upon Capital Works, at a salary of £650 per annum rising by annual increments of £25, to a maximum of £775 per annum.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the National Scheme of Conditions of Service to the satisfactory passing of a medical examination, and to one month's notice on either side.

Applicants are required to have passed the final examination of the Royal Institute of British Architects and to have had at least five years experience.

Housing accommodation will be available.

Applications accompanied by three recent references must be delivered to the undersigned not later than June 25th, 1955.

R. S. RAINFORD,
Clerk and Solicitor,
Council Offices,
Exmouth. [1148]

APPOINTMENTS—contd.**COUNTY BOROUGH OF BURY.**

APPLICACTIONS invited for appointment of ARCHITECTURAL ASSISTANT, Borough Engineer's Department. Salary up to £650-£775, National Scale of Salaries, according to qualifications and experience.

The appointment is superannuable and subject to medical examination.

Applications, stating age, details of training, qualifications and experience, together with names and addresses of two persons to whom references may be made, must reach me not later than June 25.

EDWARD S. SMITH,
Town Clerk.

Town Hall,
Bury.

[1173]

COUNTY BOROUGH OF WEST HAM.**BOROUGH ARCHITECT AND PLANNING OFFICER'S DEPARTMENT.**

THREE are vacancies on the permanent staff for:

- (a) ASSISTANT ARCHITECTS (£675-£825 and £650-£775).
- (b) ARCHITECTURAL ASSISTANTS (£500-£640).

Plus London Allowance.

For posts (a) applicants should be A.R.I.B.A., or Registered Architect; (b) Inter. standard with office experience.

Application forms and details from Borough Architect and Planning Officer, Thomas E. North, O.B.E., F.R.I.B.A., Dist. T.P., 70, West Ham Lane, Stratford, E.15 (returnable by 28th June, 1955). [1135]

URBAN DISTRICT COUNCIL OF FELTHAM.

TEMPORARY ARCHITECTURAL ASSISTANT required at a salary within the National Scales, according to the qualifications and experience of the successful applicant.

Forms of application, obtainable from the undersigned, must be returned accompanied by copies of two testimonials, not later than 28th June, 1955. Canvassing directly or indirectly will disqualify and applicants must disclose, in writing, whether to their knowledge they are related to any member of or the holder of any senior office under the Council.

Council Offices, M. W. COUPE,
Feltham, Middlesex. Clerk of the Council.

[1165]

BRACKNELL DEVELOPMENT CORPORATION.

APPLICACTIONS are invited for the post of ARCHITECT, Grade III. Salary £975 x £50(3) x £45(1) = £1,170. Applicants should be Corporate Members of the R.I.B.A. and should have had considerable experience in the execution of working drawings and the supervision of contracts.

Superannuation scheme, Medical Examination. Housing available in due course. Apply by 28th June giving age, education and qualifications; experience and appointments held (with dates and salaries) and two references, to the General Manager, Bracknell Development Corporation, Farley Hall, Binfield, Bracknell, Berks. [1180]

LEEDS REGIONAL HOSPITAL BOARD.

ASSISTANT ARCHITECT. Scale £625—£890 (at present under review). Commencing salary dependent upon practical experience at full professional standard.

Applicants interested in the appointment can obtain further information regarding the scope of the work from P. B. Nash, A.R.I.B.A., Architect to the Board.

Applications, stating age, qualifications, experience (including details of present and former employment), together with the names of two referees, to the Secretary, Park Parade, Harrogate, by 9th July, 1955. [1169]

COUNTY BOROUGH OF EAST HAM.**TEMPORARY BUILDING INSPECTOR—GRADE II—£560-£640.**

LONDON Weighting is paid in addition. Salary in excess of the minimum may be paid according to qualifications and experience.

A subsistence allowance may be granted over a reasonable period to the person appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Further details and application forms, returnable by 2nd July, 1955, from the Town Clerk, Town Hall, East Ham, E.6. [1189]

APPOINTMENTS—contd.**BOROUGH OF WALTHAMSTOW****BOROUGH ARCHITECT, ENGINEER & SURVEYOR'S DEPARTMENT.****ASSISTANT QUANTITY SURVEYOR.**

APPLICACTIONS are invited for the appointment of ASSISTANT QUANTITY SURVEYOR on Grade II, A.P.T. Division (£590-£670 inclusive of London Weighting).

Applicants for the appointment must have had at least two years' recent practical experience.

Applications, with names of two persons for reference, should be received by the undersigned not later than Saturday, the 2nd July, 1955, endorsed "Quantity Surveyor."

Town Hall, G. A. BLAKELEY,
E.17. Town Clerk. [1188]

TENDERS**EDUCATION COMMITTEE****COUNTY BOROUGH OF BRIGHTON.****TENDERS** are invited for:**ERECTION OF TWO ADDITIONAL CLASSROOMS AT COLDEAN PRIMARY SCHOOL.**

Bill of Quantities and form of tender may be obtained from the Borough Engineer & Surveyor, 26-30, Kings Road, Brighton, on or after Monday, 20th June, 1955, on receipt of a returnable deposit of £2 2s.

Tenders are to be delivered to the Borough Engineer & Surveyor's office in plain sealed envelopes not later than 12 noon on Monday, 4th July, 1955.

W. O. DODD,
Town Clerk. [1181]

MISCELLANEOUS SECTION

RATE: 1/6d. per line, minimum 3/-, average line 6 words. Each paragraph charged separately.

BOX NOS. add 2 words plus 1/- for registration and forwarding replies which should be addressed c/o, "The Architect & Building News," Dorset House, Stamford Street, London, S.E.1.

PRESS DAY Monday. Remittances payable to Iliffe & Sons Ltd., Dorset House, Stamford Street, London, S.E.1.

No responsibility accepted for errors.

ARCHITECTURAL APPOINTMENTS VACANT

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc. if the applicant is a man aged 18-64 or a woman aged 18-50 inclusive, unless he or she or the employer is excepted from the provisions of The Notification of Vacancies Order, 1952.

RAMSEY, MURRAY & WHITE have vacancy for—

ARCHITECTURAL ASSISTANT, about intermediate standard, preferably with office experience.

Salary according to qualifications.—Apply 32, Wigmore St., London, W.1, or Telephone Welbeck 1409. [1094]

FRY, DREW, DRAKE & LASDUN have vacancies for Architectural Assistants of experience or good qualifications. Overseas and U.K. work.

Write, with details of training, qualifications, experience, etc., to Secretary, 63, Gloucester Place, W.1. [1161]

Architectural assistant, intermediate approaching final, commercial and industrial work; large-scale contracts.—Watson, Johnson, Stokes, Victoria Square, Birmingham. [1024]

SENIOR Assistant required in busy practice in West End. Age about 30 years, qualified, with several years' experience and capable of running contracts.—Box 3851, c/o A. & B.N. [0636]

ARCHITECTURAL APPOINTMENTS VACANT—contd.

PRIVATE PRACTICE. Progressive Brighton firm requires immediately Senior Assistants to control works in large and varied practice. Salary and bonus according to experience. Box 4544, c/o A. & B. N. [1171]

SALARY of £900-£1,000 offered by West End firm for a Senior Architectural Assistant, knowledge of school and hospital work an advantage.—Write, giving full details of age, experience, etc., to Box 4543, c/o A. & B. N. [1170]

JUNIOR and intermediate architectural assistants required urgently in London office with widely varied practice; good salaries; 5-day week.—Lewis Solomon, Son & Joseph, Hol. 5108 or 7082. [0938]

GOLLINS, MELVIN, WARD & PARTNERS, 15, Manchester Sq., W.1, require senior and junior staff, competent working drawings essential; opportunity to work on contemporary buildings. Write or Tel. Welbeck 9991. [1128]

ASSISTANT required who is a really good draughtsman: about intermediate standard; no Saturdays.—Write Wimperis, Simpson & Fyffe, Architects, 61, South Molton St., W.1, or Tel. Mayfair 1277. [1183]

ASSISTANTS required, fully qualified to operate principally on design and planning of projects including cinemas, offices, hospital work, etc.; previous office experience advantageous but main qualification to prepare quick and competent sketch designs.—Box 4334, c/o A. & B. N. [1115]

J DOUGLASS MATHEWS & PARTNERS, Chartered Architects, 3, Ebury St., London, S.W.1, invite applications for two vacancies for assistant qualified architects and one vacancy for junior assistant; salaries in accordance with normal rates and experience. [1182]

Architectural Assistants (2) of Senior and Intermediate R.I.B.A. standard required for busy London architects; excellent prospects for advancement.—Applications, stating age, experience, qualifications and salary required, to Box 4573, c/o A. & B. N. [1184]

Architectural Assistant urgently required, Intermediate stage or above and with practical experience particularly in traditional domestic and other work.—Please write stating age, experience and salary required to Alleyne & Mansel, 1a, Berners Street, London, W.1. [0004]

Architect's Assistants required by Manchester firm of architects. Some previous office experience desirable and not less than Intermediate R.I.B.A. standard.—Write stating age, experience, qualifications and salary required, Box 4506, c/o A. & B. N. [1168]

Architectural Assistants required of Intermediate R.I.B.A. standard for work on contemporary industrial buildings. Good salaries and plenty of opportunity for initiative. London office.—Write, giving details of salary, experience, to Box 4474, c/o A. & B. N. [1160]

CLERK of Works, experienced in London building, required for West End contract commencing August and extending four to five years with prospects of permanent employment to follow.—Apply by letter stating age, experience, salary, etc., to Slater, Uren & Pike, 29, Gower St., W.C.1. [1166]

QUALIFIED Architectural Assistants of good experience are required by Sir Percy Thomas & Son, of 10, Cathedral Road, Cardiff; the appointments offer excellent opportunities for advancement to men who are prepared to use initiative and prove ability.—Applications in writing, stating age, experience and present salary should be addressed to The Secretary. [1175]

SENIOR Assistant, A.R.I.B.A., or equivalent with experience of domestic design, used to both office and site working and supervision; required by Architect dealing with housing and shops for a London company. Work to be in London and Pinner. Salary £750-£800 according to qualifications. Pension scheme.—Box 4424, c/o A. & B. N. [1141]

2 ASSISTANTS; inter. standard preferably with some office experience, commencing salary £500-£650 according to qualification, interesting work on large scale housing and flats, schools, hospitals, etc., permanent and progressive situations for good men, 5-day week.—Write or phone William Crabtree, 8, Robert Adam St., W.1. Welbeck 8918. [1177]

Architect's Assistants required for Staff Architect's Department at Head Office of Dolcis Shoe Co., Inter. R.I.B.A. or equivalent standard required; keen interest in contemporary store design and enthusiasm for hard work. CanTeen, sports/social club and non-contributory pension scheme.—Please apply in writing to Dolcis Shoe Co., 7-13, Great Dover St., S.E.1. [1163]

ARCHITECTURAL APPOINTMENTS VACANT—contd.

CLIFFORD TEE and GALE, F.F.R.I.B.A., require architectural assistants in their Westminster and Birmingham offices for work on research laboratories and other interesting commercial and industrial projects; salary £500 to £800 according to experience; five-day week; pension scheme.—Apply to 5, Buckingham Palace Gardens, S.W.1 (Sloane 2296) or 43, Frederick Road, Birmingham, 15 (Edgbaston 3676). [1139]

Architectural Assistant, capable young man to assist in Architectural Department of progressive South London Contractors; work entails land surveys, preparation of drawings, details and specifications for estate development, domestic and industrial work, salary according to experience with good prospects in this pensionable post.—Please write stating age, technical education, salary required, previous employers and brief details of experience to Box 4550, c/o A. & B.N. [1176]

Architectural Draughtsman, preferably having some knowledge or experience of acoustics, is required by a company of repute to prepare ceiling plans, lay-outs and designs in connection with this interesting and specialised type of work. Applicants could, with advantage, reside in the South London area and should forward full details, which will be regarded as confidential, of age, experience and present salary, to Advertiser, Box 951, c/o Winter Thomas Co., Ltd., 31, Great Queen St., London, W.C.2. [1164]

MINISTRY OF WORKS require Temporary Architectural Assistants of Intermediate R.I.B.A. standard in the London Drawing Office of the Ancient Monuments Branch, with at least three years architectural training and some experience in an architect's office. Applicants must also have experience of building and site surveying, a sound knowledge of construction and a live interest in historic architecture. Theodolite and levelling knowledge are desirable. Salary £442 to £695 per annum; starting pay according to age and experience. Prospects of promotion and permanency. State age and full details of training and experience to Ministry of Works, W.G.10/A25 (C), Abell House, John Islip Street, S.W.1. [1149]

MINISTRY OF WORKS require Architectural Assistants for drawing offices in London, Edinburgh and various provincial offices, with at least three years' training, some experience in an architect's office and of Inter. R.I.B.A. standard. London salary £442 to £695 per annum; rates elsewhere slightly less. Starting pay according to age and experience; prospects of promotion and permanency.—State age and full details of training and experience to E. Bedford, Esq., C.V.O., A.R.I.B.A., Chief Architect, Ministry of Works, 20 (E), Abell House, John Islip Street, London, S.W.1. [1025]

Architectural Assistant required by the Government of Kenya P.W.D. for one term of 36-45 months in the first instance. Salary scale (including Inducement Pay and temporary Cost of Living Allowance) £838 rising to £1,359 a year. Commandant's salary according to experience. Gratuity of 13½% of total basic salary plus Inducement Pay drawn during contract. Outfit allowance £30. Free passages. Liberal leave on full salary. Candidates must have passed the Intermediate Examination of the R.I.B.A. and be capable of working up sketch designs and preparing full working drawings for various types of Government buildings ranging from small domestic work to large multi-storyed buildings. They must have had at least four years actual experience in an Architect's Office and have a sound knowledge of building construction.—Write to the Crown Agents, 4, Millbank, London, S.W.1. State age, name in block letters, full qualifications and experience and quote M2B/40529/AF. [1172]

ARCHITECTURAL APPOINTMENTS VACANT—contd.

Architectural assistant required in London office of The British Petroleum Co., Ltd., to prepare working drawings for small industrial buildings and housing layouts, age 21-30 years; R.I.B.A. Intermediate standard with some previous office experience is desirable; will be expected to spend periods of temporary duty at refineries in the U.K. or abroad if required; salary according to age, qualifications and experience; non-contributory pension scheme; luncheon club facilities.—Write, giving full details, quoting H.3424, to Box 7760, c/o 191, Gresham House, E.C.2. [1187]

SITUATIONS VACANT

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc. If the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is excepted from the provisions of The Notification of Vacancies Order, 1952.

HENING and CHITTY, F.R.I.B.A., have drawing office vacancies, salaries £750 to £900.—particulars in writing to 20, Gower St., W.C.1. [1138]

CONTRACTOR'S Foreman required for one 12-month tour (or possibly two) in Gold Coast, the work required is the building of a large concrete warehouse, with difficult foundations, man with joiner's basic trade an advantage, also experience of pile-driving; salary (including allowances) £1,200 per annum plus bonus, free passage, free bungalow accommodation, pleasant conditions.—Apply in confidence to F. Hills & Sons, Ltd., Norton Rd., Stockton-on-Tees. [1174]

SERVICES OFFERED

WE cover the West Country! Specialists in Oil Fired Heating Equipment.—Enquiries to: G.M. Engineers, Honiton, Devon. [1158]

COUNCIL plans prepared from rough sketches, with 4 prints, 75s to 135s max.—Eileen Russell, Maryville, Newlands Lane, Hitchin, Herts. [1134]

Architects models, scale models, in any medium by experienced craftsmen, moderate quotations.—A. Greenside, 104, Station Parade, Harrogate. [1153]

GOOD lettering is essential for commemorative wall tablets, foundation stones, etc. Designs prepared and estimates given for the finished work in any suitable material. Renowned as a centre for lettering since 1934. Sculptured Memorials, 67 Ebury Street, S.W.1. Sloane 6549. [0236]

Architects, Surveyors and Contractors.—Our drawing office service is always available for the preparation of plans, designs, sketches, tracings and prints of houses, bungalows, stores, shops, structural alterations, furniture, interior decorations, signs and landscape gardens. Surveys with photography at any distance. Materials supplied, charges moderate, monthly accounts, strict privacy guaranteed. Quotations if required.—Allerton Studios, Designers and Draughtsmen, 14, Malley Avenue, S.E.27. Gip. 3782. [0141]

BUILDING FINANCE

DEVELOPMENT schemes purchased or financed to completion; over £3M. available.—Architects or principals only apply to Box 3852, c/o A. & B.N. [1020]

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260, LANGHAM ROAD, LONDON, N.15
PHONE: BOWES PARK 3757 & 7548

FOR SALE

SPAR, black and white, for pebble dash, terrazzo, etc., jin down only, low price.—Write, Henshaw & Co., Clearmount Road, Weymouth. [1107]

FISH Hill Quarry, Fish Hill, Near Broadway, Worcs.—For sale, Cotswold building stone and hardcore, delivered or collected from quarry.—Apply to Baillie, Brind & Co., Ltd., Prudential Chambers, Banbury, Oxon. [1082]

ALL hardwood mouldings, plain and embossed, embossed ornaments and dowels; send for catalogue and so-day's lowest trade prices.—Dareva's Moulding Mills, Ltd., 60, Pownall Road, Dalston, E.8. Clissold 1543/4. [1042]

JOINTLESS composition flooring in attractive colour range—quotations free.—Full particulars from the Liexot Asbestos Flooring Co., Ltd., 3, Corbett's Passage, London, S.E.16 (Dept. A), Bermondsey 4341-2-3. [10622]

BUSINESS OPPORTUNITY

Architect retiring wishes to dispose of his practice in small town, Western district.—Box 4566, c/o A. & B.N. [1178]

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"Architects' Detail Sheets." Edited by Edward D. Mills, F.R.I.B.A. Provides specially prepared scale detail drawings and photographs showing how contemporary British and foreign designers have combined the twin essentials of good construction and satisfactory appearance. The selected examples cover a wide range of problems from windows and door openings to staircases, fireplaces and internal fittings and furniture. Contains 96 reference sheets in all. 25/- net from all booksellers. By post 26/3 from The Publishing Dept., Dorset House, Stamford St., London, S.E.1.

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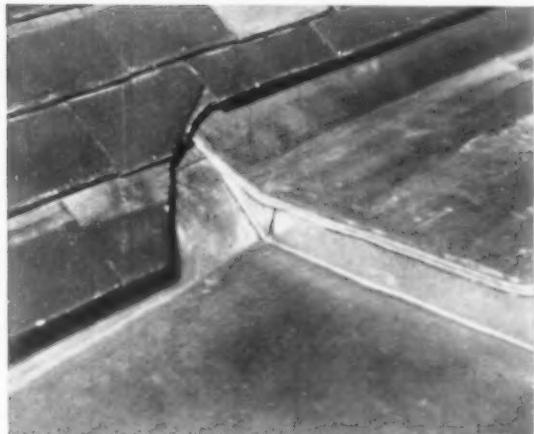
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British Plaster Board (Manufacturing) Ltd.	Gimson & Co. (Leicester) Ltd.	Newman, Wm., & Sons Ltd.	—	Thorneton, William, & Sons Ltd.
British Plastics Exhibition & Convention	Girling Ferro-Concrete Co., Ltd.	Nine Elms Stonemasonry Works	—	Turner, Chas., & Son Ltd.
British Plumber Ltd.	Gliksten, J., & Co. Ltd.	Normid Ltd.	33	Turners Asbestos Cement Co., Ltd.
British Reinforced Concrete Engineering Co. Ltd., The	Graff, B. J.	Norris, C. W., Ltd.	—	True Flue Ltd.
The O.B.C.	Graham & Iron Co. Ltd.	Northarc Organisation, The	—	Trussed Concrete Steel Co. Ltd.
British Titan Products Co., Ltd.	Grange-Camelion Iron Co. Ltd.	Norwood Steel Equipment (London) Ltd.	—	Turner, Chas., & Son Ltd.
Brookhouse Steel Structures Ltd.	Granwood Flooring Co. Ltd.	Nu-Swift Ltd.	—	Twistrel Reinforcement Ltd.
Bryce White & Co. Ltd.	Gretz, W. & Co. Ltd.	Odoni, A. A., & Co., Ltd.	—	Tyrol Sales Ltd.
Building Plant Exhibition	Greenwood's & Airvac Ventilating Co. Ltd.	Orlit Ltd.	—	Unique Balance Co., Ltd.
Burn Bros. (London) Ltd.	Gulf Radiators Ltd.	Parmiter, Hope & Sugden Ltd.	—	Unit Construction Co. Ltd.
Cafferton & Co. Ltd.	Gummers Ltd.	Parsons, Thos., & Sons Ltd.	—	United Merchants Ltd.
Callow Rock Lime Co. Ltd., The	Hale & Hale Ltd.	Patent Glazing Conference, The	—	United Paint Co. Ltd.
Carbone Lorraine Ltd.	Hall, Hardinge, Ltd.	Penfold Fencing & Engineering Ltd.	—	United Steel Companies Ltd.
Carriters Switches Ltd.	Hall, J. & Sons, Ltd.	Permaforce Ltd.	—	Veitchi Company Ltd., The
C&P Development Ltd.	Hall, K. & Sons, Ltd.	Permanite Ltd.	2	Velux, Co. Ltd., The
Cape Asbestos Co. Ltd., The	Hastings Ltd.	Petradene Ltd.	—	Vulcanite Ltd.
Carline Plaster & Cement Co., Ltd.	Haywards Ltd.	Philippe Electrical Ltd.	—	Walker Croweller & Co. Ltd.
Celion Ltd.	Henley's, W. T., Telegraph Works Co. Ltd.	Phoenix Rubber Co. Ltd.	19	Wall Paper Manufacturers Ltd.
Celotex Ltd.	Hewitt, F. & D. M., Ltd.	Pickeringe Ltd.	—	Wallis, G. E., Ltd.
Cement Marketing Co. Ltd.	Heywood, W. H., & Co. Ltd.	Pilkington Bros. Ltd.	—	Ward & Co.
Chase Products Engineering Ltd.	Higginbotham, A. & Sons, Ltd.	Pilkingtons Tiles Ltd.	—	Ward, Thos. W., Ltd.
Chawton Safe & Engineering Co. Ltd.	High Duty Alloys Ltd.	Pitman, Sir Isaac & Sons Ltd.	—	Warner, S. & Son, Ltd.
Cheetham, A. J., Ltd.	Hilger & Watts Ltd.	Plannair Ltd.	—	Water Ltd.
Cheetham, H. & Co. Ltd.	Hill, Aldam E., & Co. Ltd.	Pollard, E., & Co. Ltd.	—	Welsley Trading Co. Ltd.
Chesterman, James, & Co. Ltd.	Hills, F., & Sons Ltd.	Potter, F. W., & Soar Ltd.	—	West, A., & Partners
Chilton Steel Ltd.	Hills (West Bromwich) Ltd., The	Proctor Bros. (Wireworks) Ltd.	29	West's Piling & Construction Co. Ltd.
Chubb & Son's Lock & Safe Co., Ltd.	Holland & Hannen and Cubitts Ltd.	Pyrotex Ltd.	—	Williams & Williams Ltd.
Churchouse, C. M., Ltd.	Holloway Bros. (London) Ltd.	Radiation Group Sales Ltd.	—	Williams, John & Sons, (Cardiff) Ltd.
Clarke Ellard Engineering Co., Ltd.	Holophane Ltd.	Rainey & Porter Ltd.	—	Wood, Edward, & Co. Ltd.
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Coal Utilisation Council	—	Reynolds, H. & L., Ltd.	—	—
Coins Products (Sales) Ltd.	—	Richardson & Starling Ltd.	27	—
Colthurst Symons & Co. Ltd.	—	Ringmer Building Works Ltd.	—	—
Compactom Ltd.	—	—	—	—

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Super Purity (99·99%) Aluminium

for roofing, flashings and weatherings



Case history No. 3

Architects:

London County Council Architects Department

Roofing Contractors:

Builders Iron & Zincwork Ltd.

Details:

Aristotle Road School, Brixton, London.
Gutter linings in 20 s.w.g. Super Purity Aluminium

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considerably less than the more traditional plumber's metals, although it is capable of lasting just as long. Super

Purity is particularly adaptable to school roofs both from the economical and the practical points of view.

Plumbing contractors and craftsmen will be interested in the instructive booklet "Super Purity Aluminium—Technical Notes for Plumbers" and other illustrated literature obtainable from the Development and Technical Service Department of The British Aluminium Co. Ltd.



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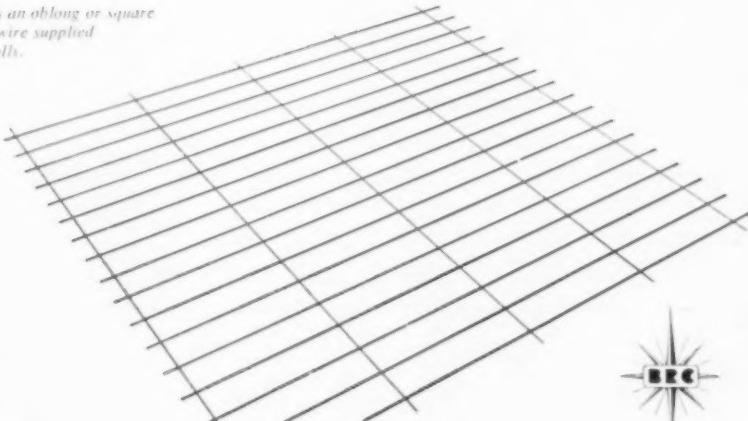
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advantages — for example, 5 ins. of concrete reinforced

with BRc No. 7 is stronger than 8 ins. unreinforced.

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mesh of steel wire supplied
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